ECMS Highway Construction

Contract: 90197

HRI, Inc. XX-XXXXXXX

State College

814-238-5071 (phone)

814-238-0131 (fax)

hri@hrico.com

Prime Business Partner

BucksCounty

SR 2020, Section AMT

Tyburn Road o/ Amtrak

Location

P-60202007AMT-0610-361-2

WBS Element

September 13, 2012

Bid Opening

TABLE OF CONTENTS

Contract

Addendum issued subsequent to the printed proposal have been incorporated into the text of this contract and the modified portions are annotated in the contract - e.g., A1, A2 etc.

Incorporated Addenda are As follows:

Addendum No. 1,	**A1,**	dated 08/08/2012
Addendum No. 2,	**A2,**	dated 09/07/2012
Addendum No. 3,	**A3,**	dated 09/10/2012

THIS AGREEMENT, Made this *11* day of *October* A.D. *2012*, between the Commonwealth of Pennsylvania by the Secretary of Transportation, hereinafter called the Commonwealth and *HRI, Inc.* his, hers, its or their executors,administrators, successors, or assigns, hereinafter called the Contractor.

W I T N E S S E T H:

1. That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Commonwealth, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor in the improvement of a certain section of highway at the unit prices bid by said Contractor for the respective estimated quantities aggregating approximately the sum of *$14,916,363.89* and such other items as are mentioned in the Contractor's original proposal, which proposal and prices named, together with Publication 408/2011-2 - Specifications (as specified in the proposal), are made a part of this contract and accepted as such, also the drawings of the project, prepared and/or approved by the Department of Transportation, which drawings are also agreed by each party as being a part hereof.

2. The location and description being situated as follows:
The description and location of the project is as follows: Replacement of existing bridge super structure and desinated portions of substructure of the Tyburn Road bridge over AMTRAK, reconstruction of Tyburn Road, and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 2020, SECTION AMT, in Bucks County, Falls Township from approximately station 77+70 at segment 0030 offset 1481 to approximately station 213+00 at segment 0080 offset 4214.

3. The Contractor further covenants and agrees that all work shall be performed in the best and most workmanlike manner. He also agrees that all materials furnished and labor performed shall be in strict and complete conformity, in every respect, with all parts of this contract and shall be subject to the inspection and acceptance of authorized representatives of the Department of Transportation. In the event that any portion of work (including materials supplied pursuant thereto) performed by the Contractor is rejected by the Department's authorized representatives as defective, unsuitable, or unacceptable, the Contractor agrees to remove and replace all such rejected portions of work in conformance with this contract and to the satisfaction of and at no expense to the Department. The Contractor further covenants that prompt payment will be made in full for all labor and materials used in the performance of work on this project.

4. The Contractor covenants and agrees that all work (including, but not limited to, all labor performed and all materials supplied) on this project shall be performed and completed to the satisfaction of the Chief Highway Engineer of the Department of Transportation on or before the expiration date of *10/18/2014* . If, for any reason, except as provided in the contract, the Contractor fails to complete all work on this project to the satisfaction of the Chief Highway Engineer within the aforementioned time allowed, the Department shall deduct from any sums due or which may become due the Contractor the amount indicated in the Specifications for each calendar day used in excess of the aforementioned number of days allowed, or, in case a completion date is fixed, for each calendar day elapsing between that completion date and the actual date of completion. If no sums are due the Contractor, the Contractor agrees to remit to the Department the aforementioned sum for each day used in excess of the time allowed for completion of the contract. The amounts deducted or remitted under this paragraph are liquidated damages and not penalties.

5. The Contractor further covenants and warrants that the Contractor has had sufficient time to examine and has examined the site of the contract work to ascertain for itself those conditions such as may be determined by inspection, investigation, and inquiry, including the location, accessibility, and general character of the site.

6. The Contractor further covenants that he has not relied upon any information provided by the Department, including information contained in the Special Provisions, concerning the time within which publicly or privately- owned facilities below, at or above the ground are expected to be installed, removed, repaired, replaced, and/ or relocated; that he has not relied upon any information provided by the Department concerning the location or existence of all such facilities that might be below, at or above the ground; that he has contacted or will contact all owner of such facilities to verify the location and position of all such facilities and the time within which work on such facilities will be performed; and that he is aware delays might be incurred in the performance of work on this project as a result of work being performed or that will be performed on such facilities by their owners. It is understood further that, notwithstanding assistance of any kind and extent that might be provided by the Department, the Contractor, in every instance, bears the ultimate responsibility of resolving all disputes of every kind with the owners of such facilities. The Contractor agrees to save and hold the Department harmless from liability for all delays, interference and interruptions that might arise during the performance of work on this project as a result of work being or that will be performed on such publicly or privately-owned facilities.

7. The Contractor further covenants and warrants that he has read, is completely familiar with and understands thoroughly the General Conditions; the Specifications of the Commonwealth of Pennsylvania, Department of Transportation, currently in effect; the Supplements, Special Provisions and/or Conditions; and any other addenda or requirements, contained in the governing the performance of work under this contract, whether attached hereto and made a part hereof, or incorporated herein by reference.

8. It is distinctly understood and agreed that the Contractor shall not do any work (including, but not limited to, the supply of labor and/or materials) not covered by the specifications and the contract, unless such work has been authorized in writing as provided in the Specifications. In no event shall the Contractor incur any liability by reason of refusing to obey any verbal directions or instructions that he might be given to perform additional or extra work. Likewise, the Department will not be liable for any work performed as additional or extra work, unless such work is required of the Contractor in writing as provided in the Specifications. All such work which might have been performed by the Contractor without such written order first being given shall be at the Contractor's risk, cost, and expense, and the Contractor hereby covenants and agrees that, without such written order, he shall make no claim for compensation for such unauthorized work.

9. It is further distinctly agreed that the Contractor shall not assign this contract, nor any part thereof, nor any right to any sums to be paid him hereunder, nor shall any part of the work to be done or material furnished under this contract be sublet, without the consent in writing of the Secretary of Transportation.

10. It is also agreed and understood that the acceptance of the final payment by the Contractor shall be considered as a release in full of all claims against the Commonwealth of Pennsylvania arising out of, or by reason of, the work done and materials furnished under this contract.

11. The Contractor shall accept, insofar as the work covered by the contract is concerned, the provisions of the Workmens Compensation Act of 1915, and any supplements or amendments thereto, and shall insure his liability thereunder or file with the Department of Transportation a certificate of exemption from insurance from the Bureau of Workers' Compensation of the Department of Labor and Industry.

12. In order to secure proper and complete compliance with the terms and provisions of this contract, the Contractor shall provide a bond in a sum equal to one hundred percent (100%) of the total contract price of the work to be done. The Contractor shall also secure an additional bond in the same amount for the prompt payment in full for all labor and materials supplied in performing work on this project. Both bonds are attached to and made a part of this contract.

13. Conditioned upon compliance by the Contractor with all pertinent conditions and procedures contained in the contract, claims for damages or extra costs in excess of three hundred dollars ($300.00) arising out of disputes pertaining to this contract shall be referred to the Board of Claims pursuant to Section 1724(a) of the Commonwealth Procurement Code, 62 Pa. C.S. § 1724(a).

14. If for any reason the Commonwealth Procurement Code is inoperative or the Board of Claims cannot function, such claims shall be referred and decided by a panel consisting of the Secretary of Transportation and the General Counsel or their respective deputy or deputies.

15. The Contractor hereby further agrees to receive and the Commonwealth agrees to pay the prices set forth in the linked bid items as full compensation for furnishing all the materials and labor which may be required in the prosecution and completion of all work to be done under this contract, and in all respects to complete the contract to the satisfaction of the Secretary of Transportation.

16. The Contractor certified in his, her, its or their bid submission (covering federal aid projects only) to the disclosure of lobbying activities and, if applicable, completed the disclosure form and by said certification understands that Public Law 101-121, Section 319, prohibits federal funds from being expended by recipient or any lower tier sub-recipients of a federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence a federal agency or Congress in connection with the awarding of any federal contract, the making of any federal grant or loan, or the entering into of any cooperative agreement.

17. If federal funds are involved, the Contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. Contractor shall carry out applicable requirements of 49 C.F.R. Part 26 - DATED OCTOBER 16, 2001 in the award and administration of United States Department of Transportation assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the Pennsylvania Department of Transportation deems appropriate. Contractor must include this assurance in each subcontract that it signs with a subcontractor.

Fiscal Information:

Recorded Number:	90197
Certified Fund Available Under Activity Program:	361

Symbol: 010-008-26185-12/13/14-2

Amount: $14,916,363.89

Contract Workflow Status

Status	Name	Disposition	Date/Time
Draft	Douglas A Nace/PennDOT	Award	10/03/2012 11:04:35 AM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/03/2012 12:27:32 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/09/2012 08:49:47 AM
BOD Director Review	R. Wayne Willey/PennDOT	Sign	10/10/2012 07:47:29 AM
Chief Counsel Preliminary Review	Bradley J Billet/PennDOT	Accept	10/10/2012 12:27:44 PM
Chief Counsel Final Review	Michael H Kline/PennDOT	Accept	10/10/2012 04:30:33 PM
Comptroller Review	Matthew P Eng/PennDOT	Accept	10/11/2012 11:50:42 AM
CMD Execute	Becki G Mescher-Vuxta/ PennDOT	Submit	10/11/2012 12:34:07 PM

Addenda

Addendum: 1

Description:

The description and location of the project is as follows: Replacement of existing bridge super structure and desinated portions of substructure of the Tyburn Road bridge over AMTRAK, reconstruction of Tyburn Road, and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 2020, SECTION AMT, in Bucks County, Falls Township from approximately station 77+70 at segment 0030 offset 1481 to approximately station 213+00 at segment 0080 offset 4214.

Estimated Project:	$14,239,086.94
Federal Project Status:	Non - Federal (100% State)
MBE/WBE:	5.00% / 5.00%
Structure Work:	37.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	None
Scheduled Let:	09/13/2012 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	11/13/2012
Required Completion:	10/18/2014

Additional Information

This is an ECMS project. All Addenda will be electronically posted. Place for delivery of diskette bid before 11:00 a.m. prevailing local time on the scheduled let date: PENNDOT CONTRACT AWARDS ROOM, 7TH FLOOR; COMMONWEALTH KEYSTONE BUILDING; 400 NORTH STREET; HARRISBURG PA 17120

Item and Quantity

Modified the following Item(s):
(1) EITHER 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905
(2) AND ITEM 1002-0053 REINFORCEMENT BARS, EPOXY COATED
(3) OR ITEM 8110-0002 BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905
(4) AND ITEM 1002-0053 REINFORCEMENT BARS, EPOXY COATED
(5) OR ITEM 8100-0002 STEEL BRIDGE STRUCTURE

Special Provision

Other

Note(s):
Plan(s):
Added Erosion and Sediment Pollution Control Plan

Revise first sheet of Roadway Plan as follows:
ELECTRIFICATION MODIFICATION FOR TYBURN ROAD OVERHEAD BRIDGE REPLACEMENT M.P. 59.87 MORRISVILLE, PA PLANS....51 SHEETS

Revise sheet 2 of 51 (Electrification modifications for tyburn road overhead bridge replacement M.P. 59.87 Morrisville, PA) as follows:
Delete follwing from the "Drawing index":

S-14 MASTER BILL OF MATERIAL - STRUCTURAL ITEMS, SHEET 2

Revise Structure plan sheet 3 of 57 as follows:
EITHER 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905

Revised plan sheet(s) will be issued to the successful bidder.

Addendum: 2

Description:

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Estimated Project:	$14,584,840.78
Federal Project Status:	Non - Federal (100% State)
MBE/WBE:	5.00% / 5.00%
Structure Work:	37.00%
Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	None
Scheduled Let:	09/13/2012 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	11/13/2012
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Item and Quantity

Modified the following Item(s):
(1) ITEM 0203-0001 CLASS 1 EXCAVATION
(2) ITEM 0203-0004 CLASS 1B EXCAVATION
(3) ITEM 0205-0001 COMMON BORROW EXCAVATION
(4) ITEM 0309-0626 SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 10 TO < 30 MILLION ESALs, 25.0 MM MIX, 6" DEPTH
(5) ITEM 0350-0104 SUBBASE 4" DEPTH (NO. 2A)
(6) ITEM 0360-0001 ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH
(7) ITEM 0409-0652 SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 10 TO < 30 MILLION ESALS, 12.5 MM MIX, 2" DEPTH, SRL-H
(8)ITEM 0936-0200 STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS
(9) ITEM 0945-0001 RESET POST MOUNTED SIGNS, TYPE F
(10) ITEM 0954-0012 2 INCH CONDUIT
(11) ITEM 0954-0013 3 INCH CONDUIT
(12) ITEM 0954-0151 TRENCH AND BACKFILL, TYPE I
(13) ITEM 0954-0153 TRENCH AND BACKFILL, TYPE III
(14) ITEM 0954-0202 SIGNAL CABLE, 14 AWG, 5 CONDUCTOR
(15) ITEM 0954-0302 JUNCTION BOX, JB-27
(16) ITEM 5090-0091 REPAIR DETERIORATED CONCRETE MODIFIED
(17) EITHER 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905
(18) AND ITEM 1002-0053 REINFORCEMENT BARS, EPOXY COATED
(19) OR ITEM 8110-0002 BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905
(20) AND ITEM 1002-0053 REINFORCEMENT BARS, EPOXY COATED
(21) OR ITEM 8100-0002 STEEL BRIDGE STRUCTURE
(22) ITEM 9506-0040 PLAIN CEMENT CONCRETE PAVEMENT, 14" DEPTH

(23) ITEM 9506-0316 CONCRETE PAVEMENT CORES, 14" DEPTH

Added the following Item(s):
(1) ITEM 4309-0730 SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALs, 25.0 MM MIX, 8" DEPTH MODIFIED
(2) ITEM 0910-0005 JUNCTION BOXES J.B.-12
(3) ITEM 0910-2828 250-WATT HIGH PRESSURE SODIUM LUMINAIRE, ARM MOUNT
(4) ITEM 0910-3178 250-WATT HIGH PRESSURE SODIUM BALLAST
(5) ITEM 0910-4116 AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR
(6) ITEM 0930-0101 STEEL S OR W BEAM POSTS
(7) ITEM0930-0110 BREAKAWAY SYSTEM
(8) ITEM 0951-2130 TRAFFIC SIGNAL SUPPORT, 30' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)
(9) ITEM 0952-1040 NEMA TS-2; TYPE 2 CONTROLLER ASSEMBLY, TYPE 1 MOUNTING
(10) ITEM 0954-0201 SIGNAL CABLE, 14 AWG, 3 CONDUCTOR
(11) ITEM 0954-0600 UNINTERRUPTIBLE POWER SUPPLY (UPS)
(12) ITEM 0955-3208 VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS
(13) ITEM 0956-0770 DIGITAL WAVE RADAR DETECTION SYSTEM
(14) ITEM 0956-0801 OPTICAL PREEMPTION SYSTEM
(15) ITEM 0975-0001 REMOVE POST MOUNTED SIGNS, TYPE F
(16) ITEM 9956-0700 VIDEO DETECTOR

Deleted the following Item(s):
(1) ITEM 9955-3208 VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS (LED)
(2) ITEM 9951-0135 RESET TRAFFIC SIGNAL SUPPORT, 35' MAST ARM
(3) ITEM 0956-0131 LOOP AMPLIFIER, 2 CHANNEL RACK MOUNTED
(4) ITEM 0956-0101 LOOP SENSOR
(5) ITEM 0956-0001 DETECTOR LEAD IN CABLE
(6) ITEM 0954-0152 TRENCH AND BACKFILL, TYPE II
(7) ITEM 0954-0011 1 INCH CONDUIT
(8) ITEM 4309-0708SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALs, 37.5 MM MIX, 8" DEPTH MODIFIED
(9) ITEM 0205-0100 FOREIGN BORROW EXCAVATION

Special Provision

Modified the following Special Provision(s):
(1) 00-a01900 TRAIN INFORMATION (DAILY)
(2) 00-ITEM 4309-0726 AND 4309-0730
(3) 00-ITEM 4409-1891 AND 4409-6860
(4) 00- ITEM 5090-0091 REPAIR DETERIORATED CONCRETE MODIFIED
(5) 00-ITEM 9409-0891

Added the following Special Provision(s):
(1) 00- ITEM 9956-0700 VIDEO DETECTOR
(2) 00- SHIELDING REQUIREMENTS BY AMTRAK

Deleted the following Special Provision(s):
(1) 00- ITEM 9955-3208 VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS (LED)
(2) 00- ITEM 9951-0135 - RESET TRAFFIC SIGNAL SUPPORT, 35' MAST ARM

Other

Note(s):
Attachment(s):
(1) Added the following attachment:
Temporary Concrete Overlay General Plan & Section - For Information Only
(2) Modified the following attachment:
D4279A Railroad Crossing Data for Contractor

Plan(s):
The following plan sheet(s) has been replaced:
Roadway Plan sheets 2,3 19, 20,21,22,23, 28 and 29 of 64
Traffic Control Plans sheets 1, 9, 30, 110 and 111 of 111

Signing and Pavement Marking Plan Sheets 3,4,5,6,7 and 8 of 28
Electrification Modification Plans sheets 2 and 34 of 51
Traffic Signal Plan sheets 1,2 and 3 of 3
Structure Plan S-28905 sheets 1, 3 and 17 of 57.

Addendum: 3

Description:

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Wage Rates:	Yes
Project Type:	Standard
State Type of Work:	RECONSTRUCTION
Prequalification Required:	Yes
Pre-Bid Meeting:	None
Scheduled Let:	09/13/2012 11:00:00 AM
New Let:	
Let Date Move:	
Anticipated NTP:	11/13/2012
Required Completion:	10/18/2014

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Item and Quantity

Special Provision

Modified the following Special Provision(s):
(1) 00-ITEM 0901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Other

Bid Items

Item	Description	Quantity	Unit Price	Item Total	Addendum
0201-0001	CLEARING AND GRUBBING	1.000	$730,000.00	$730,000.00	
0203-0001	CLASS 1 EXCAVATION	38,739.000	$10.53	$407,921.67	2
0203-0003	CLASS 1A EXCAVATION	350.000	$12.17	$4,259.50	
0203-0004	CLASS 1B EXCAVATION	1,893.000	$13.23	$25,044.39	2
0204-0001	CLASS 2 EXCAVATION	218.000	$23.24	$5,066.32	
0204-0150	CLASS 4 EXCAVATION	732.000	$7.92	$5,797.44	
0205-0001	COMMON BORROW EXCAVATION	2,210.000	$12.35	$27,293.50	2
0212-0001	GEOTEXTILE, CLASS 1	14,083.000	$1.20	$16,899.60	
0212-0002	GEOTEXTILE, CLASS 2, TYPE A	670.000	$2.61	$1,748.70	
0212-0003	GEOTEXTILE, CLASS 2, TYPE B	126.000	$21.11	$2,659.86	
0309-0626	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, 10 TO < 30 MILLION ESALs, 25.0 MM MIX, 6" DEPTH	3,171.000	$29.17	$92,498.07	2
4309-0726	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALs, 25.0 MM MIX, 6" DEPTH (MODIFIED)	65,555.000	$25.13	$1,647,397.15	
4309-0730	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALs, 25.0 MM MIX, 8" DEPTH (MODIFIED)	175.000	$50.07	$8,762.25	2
0350-0104	SUBBASE 4" DEPTH (NO. 2A)	13,206.000	$6.46	$85,310.76	2
0350-0108	SUBBASE 8" DEPTH (NO. 2A)	74,483.000	$8.25	$614,484.75	
0350-0110	SUBBASE 10" DEPTH (NO. 2A)	175.000	$29.39	$5,143.25	
0360-0001	ASPHALT TREATED PERMEABLE BASE COURSE, 4" DEPTH	11,993.000	$16.41	$196,805.13	2
0409-0652	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 64-22, 10 TO < 30 MILLION ESALS, 12.5 MM MIX, 2" DEPTH, SRL-H	3,171.000	$12.73	$40,366.83	2
4409-1891	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE (LEVELING), PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, SRL-E (MODIFIED)	155.000	$131.94	$20,450.70	
4409-6860	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, >/= 30 MILLION ESALS, 19.0 MM MIX, 3" DEPTH (MODIFIED)	65,730.000	$15.78	$1,037,219.40	
0460-0001	BITUMINOUS TACK COAT	1,684.000	$1.10	$1,852.40	
0491-0019	MILLING OF BITUMINOUS PAVEMENT SURFACE, VARIABLE DEPTH, MILLED MATERIAL RETAINED BY CONTRACTOR	1,611.000	$16.77	$27,016.47	
0501-0020	PLAIN CEMENT CONCRETE PAVEMENT, 4" DEPTH	1,877.000	$6.37	$11,956.49	
0601-7016	18" REINFORCED CONCRETE PIPE, TYPE A, 25' - 1.5' FILL, 100 YEAR DESIGN LIFE	603.000	$49.00	$29,547.00	
0601-7016	18" REINFORCED CONCRETE PIPE, TYPE A, 25' - 1.5' FILL, 100 YEAR DESIGN LIFE	386.000	$49.00	$18,914.00	
0605-1480	MANHOLE	1.000	$3,842.48	$3,842.48	
0605-2710	TYPE C CONCRETE TOP UNIT AND GRATE	2.000	$1,194.08	$2,388.16	
0605-2730	TYPE M CONCRETE TOP UNIT AND GRATE	14.000	$1,062.82	$14,879.48	
0605-2850	STANDARD INLET BOX, HEIGHT < /= 10'	16.000	$1,535.51	$24,568.16	
0608-0001	MOBILIZATION	1.000	$870,000.00	$870,000.00	
0609-0002	INSPECTOR'S FIELD OFFICE AND INSPECTION FACILITIES, TYPE A	1.000	$97,322.10	$97,322.10	
0609-0009	EQUIPMENT PACKAGE	1.000	$43,181.80	$43,181.80	
0610-7002	6" PAVEMENT BASE DRAIN	13,488.000	$8.03	$108,308.64	
0615-0022	6" SUBSURFACE DRAIN OUTLETS	595.000	$28.34	$16,862.30	
0615-0040	SUBSURFACE DRAIN OUTLET ENDWALL	37.000	$528.95	$19,571.15	
0615-0066	66" RED SUBSURFACE DRAIN OUTLET MARKER	37.000	$32.70	$1,209.90	
0616-1202	CONCRETE END SECTIONS FOR 18" PIPE	9.000	$1,309.66	$11,786.94	
0619-0610	PERMANENT IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3	3.000	$18,444.92	$55,334.76	

0620-0010	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITHOUT INLET PLACEMENT	1.000	$2,068.07	$2,068.07
0620-0011	TYPICAL AND ALTERNATE CONCRETE BRIDGE BARRIER TRANSITION WITH INLET PLACEMENT	2.000	$2,068.07	$4,136.14
0620-0402	TERMINAL SECTION, BRIDGE CONNECTION	1.000	$279.47	$279.47
0620-0500	RESET GUIDE RAIL	670.000	$7.83	$5,246.10
0620-0503	REMOVE EXISTING GUIDE RAIL (CONTRACTOR'S PROPERTY)	16,287.000	$1.12	$18,241.44
0620-0862	TYPE 2-S POST ANCHORAGE	7.000	$670.72	$4,695.04
0620-1075	TYPE 2-S GUIDE RAIL	16,150.000	$17.89	$288,923.50
0620-1100	TYPE 2-SC GUIDE RAIL	213.000	$31.30	$6,666.90
0630-0010	PLAIN CEMENT CONCRETE CURB, INCLUDING REMOVAL OF EXISTING CURB	300.000	$27.13	$8,139.00
0633-0200	PLAIN CONCRETE MOUNTABLE CURB, TYPE A	15,673.000	$15.09	$236,505.57
0643-0002	TEMPORARY CONCRETE MEDIAN BARRIER, STRUCTURE MOUNTED	354.000	$82.65	$29,258.10
0644-0002	TEMPORARY CONCRETE MEDIAN BARRIER, STRUCTURE MOUNTED, RESET	290.000	$13.09	$3,796.10
4677-0001	SELECTED MATERIAL SURFACING (MODIFIED)	2,472.000	$27.98	$69,166.56
0686-0030	CONSTRUCTION SURVEYING, TYPE B, MODIFIED	1.000	$149,248.67	$149,248.67
0689-0002	NETWORK SCHEDULE	1.000	$2,878.52	$2,878.52
0696-0610	TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3	12.000	$3,437.46	$41,249.52
0697-0610	RESET TEMPORARY IMPACT ATTENUATING DEVICE, TYPE V (STANDARD), TEST LEVEL 3	11.000	$1,078.75	$11,866.25
0703-0020	NO. 1 COARSE AGGREGATE	240.000	$67.37	$16,168.80
0802-0001	TOPSOIL FURNISHED AND PLACED	1,401.000	$35.25	$49,385.25
0804-0013	SEEDING AND SOIL SUPPLEMENTS - FORMULA D	1,351.000	$10.06	$13,591.06
0804-0014	SEEDING - FORMULA E	1,266.000	$5.59	$7,076.94
0805-0022	MULCHING - STRAW	34.000	$447.15	$15,203.10
0845-0001	UNFORESEEN WATER POLLUTION CONTROL	25,000.000	$1.00	$25,000.00
0850-0021	ROCK, CLASS R-3	32.000	$73.83	$2,362.56
0850-0022	ROCK, CLASS R-4	97.000	$75.33	$7,307.01
0855-0003	PUMPED WATER FILTER BAG	4.000	$695.42	$2,781.68
0860-0000	INLET FILTER BAG FOR TYPE M INLET	33.000	$316.72	$10,451.76
0860-0002	INLET FILTER BAG FOR TYPE C INLET	2.000	$316.72	$633.44
0867-0018	COMPOST FILTER SOCK, 18" DIAMETER	15,425.000	$6.87	$105,969.75
0867-0022	COMPOST FILTER SOCK, 24" DIAMETER	2,030.000	$13.14	$26,674.20
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	1.000	$143,196.60	$143,196.60
0901-0102	SHADOW VEHICLE	2.000	$8,663.53	$17,327.06
0901-0120	SPEED DISPLAY SIGN	2.000	$4,471.50	$8,943.00
0901-0203	ARROW PANEL	6.000	$7,210.77	$43,264.62
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	365.000	$0.89	$324.85
0901-0232	ADDITIONAL WARNING LIGHTS, TYPE C	365.000	$0.34	$124.10
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	600.000	$20.12	$12,072.00
0901-0320	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW	38,194.000	$0.19	$7,256.86
0901-0330	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	24,564.000	$0.19	$4,667.16
0901-0331	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	1,440.000	$0.22	$316.80
0901-0332	8" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	7,543.000	$0.28	$2,112.04
0901-0333	12" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	180.000	$6.71	$1,207.80
0901-0340	4" STANDARD PAVEMENT MARKINGS, TAPE, YELLOW	3,488.000	$2.24	$7,813.12
0901-0350	4" STANDARD PAVEMENT MARKINGS, TAPE, WHITE	1,477.000	$2.24	$3,308.48

0901-0352	8" STANDARD PAVEMENT MARKINGS, TAPE, WHITE	544.000	$4.47	$2,431.68	
0910-0005	JUNCTION BOXES J.B.-12	1.000	$1,492.36	$1,492.36	2
0910-2828	250-WATT HIGH PRESSURE SODIUM LUMINAIRE, ARM MOUNT	1.000	$380.08	$380.08	2
0910-3178	250-WATT HIGH PRESSURE SODIUM BALLAST	1.000	$33.53	$33.53	2
0910-4116	AWG 8 UNDERGROUND CABLE, COPPER, 1 CONDUCTOR	185.000	$1.84	$340.40	2
0930-0004	POST MOUNTED SIGNS, TYPE A	533.000	$21.18	$11,288.94	
0930-0101	STEEL S OR W BEAM POSTS	2,575.000	$4.30	$11,072.50	2
0930-0110	BREAKAWAY SYSTEM	14.000	$2,476.09	$34,665.26	2
0931-0001	POST MOUNTED SIGNS, TYPE B	939.000	$22.08	$20,733.12	
0934-0002	POST MOUNTED SIGNS, TYPE E	188.000	$58.46	$10,990.48	
0936-0200	STRUCTURE MOUNTED FLAT SHEET ALUMINUM SIGNS	75.000	$2.24	$168.00	2
0937-0105	GUIDE RAIL MOUNTED DELINEATOR TYPE B, (Y/Y)	24.000	$5.59	$134.16	
0937-0113	GUIDE RAIL MOUNTED DELINEATOR TYPE D, (W/B)	303.000	$5.59	$1,693.77	
0937-0201	BARRIER MOUNTED DELINEATOR, SIDE-MOUNT TYPE R, (W/B)	163.000	$15.65	$2,550.95	
0937-0208	BARRIER MOUNTED DELINEATOR, TOP AND SIDE-MOUNT TYPE R, (W/B)	32.000	$15.65	$500.80	
0937-0213	BARRIER MOUNTED DELINEATOR, TOP-MOUNT TYPE WZ, (O/B)	163.000	$20.12	$3,279.56	
0937-0310	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-2, WHITE POST WITH WHITE/BLANK SHEETING	46.000	$55.89	$2,570.94	
0937-0314	FLEXIBLE DELINEATOR POST, SURFACE-MOUNT TYPE SM-2, YELLOW POST WITH YELLOW/YELLOW SHEETING	114.000	$55.89	$6,371.46	
0941-0001	RESET POST MOUNTED SIGNS, TYPE B	3.000	$195.63	$586.89	
0945-0001	RESET POST MOUNTED SIGNS, TYPE F	6.000	$558.94	$3,353.64	2
0951-2130	TRAFFIC SIGNAL SUPPORT, 30' MAST ARM WITH LUMINAIRE ARM (30' MOUNTING HEIGHT)	1.000	$1,676.81	$1,676.81	2
0952-1040	NEMA TS-2; TYPE 2 CONTROLLER ASSEMBLY, TYPE 1 MOUNTING	1.000	$10,049.68	$10,049.68	2
0954-0012	2 INCH CONDUIT	68.000	$3.63	$246.84	2
0954-0013	3 INCH CONDUIT	332.000	$4.25	$1,411.00	2
0954-0151	TRENCH AND BACKFILL, TYPE I	19.000	$8.78	$166.82	2
0954-0153	TRENCH AND BACKFILL, TYPE III	215.000	$39.68	$8,531.20	2
0954-0201	SIGNAL CABLE, 14 AWG, 3 CONDUCTOR	781.000	$1.34	$1,046.54	2
0954-0202	SIGNAL CABLE, 14 AWG, 5 CONDUCTOR	1,209.000	$2.74	$3,312.66	2
0954-0302	JUNCTION BOX, JB-27	1.000	$514.22	$514.22	2
0954-0600	UNINTERRUPTIBLE POWER SUPPLY (UPS)	1.000	$4,639.17	$4,639.17	2
0955-3208	VEHICULAR SIGNAL HEAD, THREE 12" SECTIONS	10.000	$860.76	$8,607.60	2
0956-0770	DIGITAL WAVE RADAR DETECTION SYSTEM	2.000	$8,652.34	$17,304.68	2
0956-0801	OPTICAL PREEMPTION SYSTEM	1.000	$8,747.36	$8,747.36	2
0960-0001	4" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	25,908.000	$0.67	$17,358.36	
0960-0002	4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS	26,361.000	$0.67	$17,661.87	
0960-0005	6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	5,892.000	$1.01	$5,950.92	
0960-0008	8" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	2,686.000	$1.34	$3,599.24	
0963-0004	4" PAVEMENT MARKING REMOVAL	76,923.000	$0.45	$34,615.35	
0963-0006	6" PAVEMENT MARKING REMOVAL	10,640.000	$0.67	$7,128.80	
0963-0008	8" PAVEMENT MARKING REMOVAL	8,087.000	$0.89	$7,197.43	
0963-0010	PAVEMENT MARKING REMOVAL (LEGENDS AND SYMBOLS)	10.000	$111.79	$1,117.90	
0964-0001	4" WHITE EPOXY PAVEMENT MARKINGS	5,688.000	$0.67	$3,810.96	
0964-0002	4" YELLOW EPOXY PAVEMENT MARKINGS	6,114.000	$0.67	$4,096.38	

0964-0005	6" WHITE EPOXY PAVEMENT MARKINGS	1,552.000	$1.01	$1,567.52	
0964-0007	6" BLACK EPOXY PAVEMENT MARKINGS	804.000	$1.01	$812.04	
0964-0008	8" WHITE EPOXY PAVEMENT MARKINGS	1,516.000	$1.34	$2,031.44	
0964-0021	24" WHITE EPOXY PAVEMENT MARKINGS	444.000	$6.71	$2,979.24	
0964-0101	WHITE EPOXY LEGEND, "ONLY", 8' - 0"	2.000	$223.58	$447.16	
0964-0222	WHITE EPOXY LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0"	2.000	$145.33	$290.66	
0966-0011	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/Y)	49.000	$27.95	$1,369.55	
0966-0014	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/R)	18.000	$27.95	$503.10	
0966-0015	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/R)	18.000	$27.95	$503.10	
0966-0017	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/B)	8.000	$27.95	$223.60	
0966-0018	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/B)	308.000	$27.95	$8,608.60	
0966-0104	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/B)	41.000	$27.95	$1,145.95	
0966-0106	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)	19.000	$27.95	$531.05	
0971-0001	REMOVE POST MOUNTED SIGNS, TYPE B	31.000	$195.63	$6,064.53	
0975-0001	REMOVE POST MOUNTED SIGNS, TYPE F	2.000	$83.84	$167.68	2
1002-0053	REINFORCEMENT BARS, EPOXY COATED	301,000.000	$1.85	$556,850.00	2
5018-0051	REMOVAL OF PORTION OF EXISTING BRIDGE (MODIFIED)	1.000	$650,000.00	$650,000.00	
5090-0091	REPAIR DETERIORATED CONCRETE (MODIFIED)	253.000	$345.96	$87,527.88	2
1091-0331	EPOXY INJECTION CRACK SEAL	71.000	$9.17	$651.07	
1999-0000	TRAINEES FOR PROJECTS 100% STATE FUNDED	2,000.000	$1.12	$2,240.00	
8110-0001	BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905	1.000	$2,990,818.72	$2,990,818.72	2
9000-0002	CATENARY STRUCTURE N-567A, AS DESIGNED	1.000	$65,000.00	$65,000.00	
9000-0003	CATENARY STRUCTURE N-568A, AS DESIGNED	1.000	$65,000.00	$65,000.00	
9000-0004	GROUNDING AND BONDING	1.000	$55,893.70	$55,893.70	
9203-0101	TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM	1.000	$16,158.07	$16,158.07	
9203-0666	UNEXPECTED REGULATED FILL AND HAZARDOUS WASTE	50,000.000	$1.00	$50,000.00	
9404-0012	PAVEMENT RIDE QUALITY INCENTIVE AND PAYMENT OF INCENTIVE, SCHEDULE B	160,000.000	$1.00	$160,000.00	
9409-0891	SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 76-22, >/= 30 MILLION ESALS, 9.5 MM MIX, 2" DEPTH, SRL-E	65,730.000	$13.07	$859,091.10	
9506-0040	PLAIN CEMENT CONCRETE PAVEMENT, 14" DEPTH	11,993.000	$73.50	$881,485.50	2
9506-0316	CONCRETE PAVEMENT CORES, 14" DEPTH	12.000	$341.16	$4,093.92	2
9619-0470	PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3 (ENERGY ABSORBING TERMINALS, TANGENT)	5.000	$2,403.43	$12,017.15	
9627-0001	TEMPORARY CONCRETE BARRIER, GUIDE RAIL STIFFENED	6,100.000	$27.78	$169,458.00	
9628-0001	RESET TEMPORARY CONCRETE BARRIER, GUIDE RAIL STIFFENED	5,850.000	$3.86	$22,581.00	
9660-0001	LANE RUMBLE STRIPS	600.000	$11.18	$6,708.00	
9660-0002	CENTERLINE RUMBLE STRIPS	1,800.000	$0.21	$378.00	
9660-0030	SHOULDER RUMBLE STRIPS	19,452.000	$0.21	$4,084.92	
9810-0001	SELECTIVE TREE TRIMMING AS DIRECTED	40.000	$155.69	$6,227.60	
9810-0052	SELECTIVE TREE REMOVAL, AS DIRECTED	25.000	$288.22	$7,205.50	
9901-0003	LOCAL POLICE	25,000.000	$1.00	$25,000.00	

9901-0450	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS	6.000	$15,873.81	$95,242.86	
9901-0701	TEMPORARY TRAFFIC SIGNALS (PERMANENT ONLY)	1.000	$28,013.92	$28,013.92	
9901-2001	CLASS 1 TOW TRUCK	100.000	$72.66	$7,266.00	
9901-2002	CLASS 2 TOW TRUCK	100.000	$72.66	$7,266.00	
9936-0010	REPLACE STRUCTURE MOUNTED SIGN	1.000	$273.88	$273.88	
9956-0700	VIDEO DETECTOR	4.000	$4,644.77	$18,579.08	2

Contract Total: $14,916,363.89

Bid Total: $14,916,363.89

Special Provisions

G2A - a00002 PUBLIC BID OPENING LOCATION

Addendum:

Associated Item(s):

Header:
PUBLIC BID OPENING LOCATION

Provision Body:

The location of the public bid opening is the Commonwealth Keystone Building, 7th Floor, Contract Awards Room, 400 North Street, Harrisburg. Allow sufficient time before the bid opening to obtain a visitor pass on the 5th Floor and to be escorted to the 7th Floor Contract Awards Room.

G101B - a00101 GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Addendum:

Associated Item(s):

Header:
GOVERNING SPECIFICATIONS AND APPLICABLE DESIGNATED SPECIAL PROVISIONS

Provision Body:

I. GOVERNING SPECIFICATIONS. This bid proposal is made under, subject to, and governed by:

Specifications **408/2011, Change No.2, Effective April 6, 2012** of the Pennsylvania Department of Transportation. Within these Specifications where dual measurement and tabular options are presented ***" English"*** standards apply.

II. APPLICABLE DESIGNATED SPECIAL PROVISIONS. The following Designated Special Provisions are found in Appendix C to the above Governing Specifications. Those that apply to this bid proposal are preceded with a check (i.e., "***X***"). Goals, minimum levels of participation, or other project specific requirements associated with these documents are also established where applicable:

(X) DSP1. Offset Provision for Commonwealth Contracts.

(X) DSP2. Contractor Responsibility Provisions.

(X) DSP3. Provisions for Commonwealth Contracts Concerning the Americans with Disabilities Act.

(X) DSP4. Minority Business and Women Business Enterprise Participation Requirements. This is used on 100% State projects requiring Prequalification. The minimum levels of participation for this project are:

MBE ; WBE

5 % ; 5 %

(__) DSP5. Minority Business and Women Business Enterprise Program. This is used only on 100% State projects over $100,000 requiring Prequalification and where DSP4 does not apply.

(__) DSP6. Minority Business and Women Business Enterprise Utilization Requirements. This is used on State projects without Prequalification requirements. Minimum participation levels of 5% for MBE and 3% for WBE of the dollar amount of the bid have been established for this project.

(__) DSP7. Disadvantaged Business Enterprise Requirements. This is used on Federal - aid projects only. In conjunction with this contract a goal of (***fill in***) % of the original contract amount has been established.

(X) DSP9. Special Supplement - Anti-Pollution Measures - August 26, 1999.

(X) DSP10. Nondiscrimination/Sexual Harassment Clause.

(X) DSP11. Contractor Integrity Provisions.

(__) DSP12. Executive Order 11246, with Appendix A and B.

G113B - a00113 CONTRACT PROVISIONS - RIGHT-TO-KNOW LAW

Addendum:

Associated Item(s):

Header:
CONTRACT PROVISIONS - RIGHT TO KNOW LAW

Provision Body:

I. Contract Provisions – Right to Know Law 8-K-1532

a. The Pennsylvania Right-to-Know Law (RTKL), 65 P.S. §§ 67.101-3104, applies to this Contract.

b. If the Department needs assistance in any matter arising out of the RTKL related to this Contract, the Department will notify the Contractor using the legal contact information provided in this Contract. The Contractor, at any time, may designate a different contact for such purpose upon reasonable prior written notice to the Department.

c. Upon written notification from the Department that it requires assistance in responding to a request under the RTKL for information related to this Contract that may be in the Contractor's possession, constituting, or alleged to constitute, a public record in accordance with the RTKL ("Requested Information"), the Contractor will:

1. Provide the Department, within 10 calendar days after receipt of written notification, access to, and copies of, any document or information in the Contractor's possession arising out of this Contract that the Department reasonably believes is Requested Information and may be a public record under the RTKL; and

2. Provide such other assistance as the Department may reasonably request, in order to comply with the RTKL with respect to this Contract.

d. If the Contractor considers the Requested Information to include a request for a Trade Secret or Confidential Proprietary Information, as those terms are defined by the RTKL, or other information that the Contractor considers exempt from production under the RTKL, notify the Department and provide, within 7 calendar days of receiving the written notification, a written statement signed by a representative of the Contractor explaining why the requested material is exempt from public disclosure under the RTKL.

e. The Department will rely upon the written statement from the Contractor in denying a RTKL request for the Requested Information unless the Department determines that the Requested Information is clearly not protected from disclosure under the RTKL. Should the Department determine that the Requested Information is clearly not exempt from disclosure, provide the Requested Information within 7 calendar days of receipt of written notification of the Department's determination.

f. Failing to provide the Requested Information within the time period required by these provisions, indemnify and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of this failure, including any statutory damages assessed against the Department.

g. The Department will reimburse the Contractor for any costs associated with complying with these provisions only to the extent allowed under the fee schedule established by the Office of Open Records or as otherwise provided by the RTKL if the fee schedule is inapplicable.

h. The Contractor may file a legal challenge to any Department decision to release a record to the public with the Office of Open Records, or in the Pennsylvania Courts, however, indemnify the Department for any legal expenses incurred by the Department as a result of such a challenge and hold the Department harmless for any damages, penalties, costs, detriment or harm that the Department may incur as a result of the failure, including any statutory damages assessed against the Department, regardless of the outcome of such legal challenge. As between the parties, agree to waive all rights or remedies that may be available as a result of the Department's disclosure of Requested information pursuant to the RTKL.

i. The Contractor's duties relating to the RTKL are continuing duties that survive the expiration of this Contract and continue as long as the Requested Information remains in the Contractor's possession.

G401A - a00401 ADVANCE NOTICE OF TRAFFIC RESTRICTIONS

Addendum:

Associated Item(s):

Header:
ADVANCE NOTICE OF TRAFFIC RESTRICTIONS

Provision Body:

Notify the Engineer at least 4 calendar days in advance of the start of any operation which will affect the flow of traffic and provide the Engineer with details of the work to be done. After notification, the District Office will advise the public of these traffic restrictions and possible delays.

G501A - a00501 AIR POLLUTION CONTROL IN AIR BASINS

Addendum:

Associated Item(s):

Header:
AIR POLLUTION CONTROL IN AIR BASINS

Provision Body:

No burning will be permitted on this project except that the Department of Environmental Protection will permit the operation of an air curtain destructor, (open pit incinerator) as defined in Title 25, Section 129.14, of the Rules and Regulations of the Department of Environmental Protection, for the destruction of wood waste generated by clearing and grubbing operations, provided that the incinerators are properly designed, located, and operated. Permission may be granted for units both within and outside the air basin areas defined in Title 25, Section 121.1 of Chapter 121 of the Rules and Regulations of the Department of Environmental Protection, but each proposal is required to be reviewed on an individual basis by the appropriate Regional Air Pollution Control Engineer.

If an air pollution problem is subsequently created by the operation of such a unit the Department of Environmental Protection will notify the Contractor and will take appropriate enforcement action if necessary.

G901B - a00901 ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN

Addendum:

Associated Item(s):

Header:
ALTERNATE EROSION AND SEDIMENT POLLUTION CONTROL PLAN

Provision Body:

Comply with these requirements when submitting an alternate plan for accomplishing equal or better temporary and permanent erosion and sediment pollution control. Do not start work until the alternate erosion and sediment pollution control plan, schedules, and operation methods have been approved by the Department and the Department of Environmental Protection, or by the Department and the County Conservation District, as applicable.

Apply for any earth disturbance permits or permit amendments not included in the proposal documents that are required because of the nature of the contemplated construction procedures.

Prepare and furnish, with the applications, plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Provide simultaneously to the District Executive a copy of all plans and documents that affect the construction requirements.

Provide immediately to the District Executive any modifications that are made to the plans and documents that are required by the Department of Environmental Protection or the County Conservation District.

Obtain the approval of the Department and the permit from the Department of Environmental Protection prior to beginning any work when a permit is required, and the approval of the Department and the County Conservation District when a permit is not required.

Acquire areas outside of the right- of- way that are necessary for erosion and sediment pollution control. Proceed with the agreement procedure described in Section 105.14 (Borrow Areas and Waste Areas).

G1001B - a01001 CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL

Addendum:

Associated Item(s):

Header:
CONSTRUCTION PROCEDURES - EROSION AND SEDIMENT POLLUTION CONTROL

Provision Body:

I. Observe the following applicable procedures, as ordered during the contract life:

(a) Conduct operations as shown or specified in the approved Erosion and Sediment Pollution Control Plan. Do not discharge water containing sediments or pollutants into streams.

(b) Direct flowing water away from project construction areas.

(c) Do not enter streams, construct rock crossings, causeways or cofferdams unless authorized by provisions of the Department of Environmental Protection Water Obstruction and Encroachment Permit or by General Permit BDWM-GP-8.

(d) If authorized, limit movement of equipment through stream beds in accordance with the approved plan to prevent siltation or disturbance. Permit equipment to cross flowing channels only on rock roadways or bridges.

(e) Unless otherwise stipulated in the Permit, construct rock crossings, causeways or cofferdams with rock having a minimum size of 75 mm (3 inches) or larger. The surface may be choked with stone aggregate having a minimum size of 9.5 mm (3/8-inch). When constructing crossings, causeways or cofferdams, do not use earth or other materials that may cause sediment pollution, unless lined with geotextiles as indicated or specified.

(f) Seed or stabilize stream banks immediately upon completion of grading.

(g) Seed and mulch finished slopes in increments of approximately 4.5 m (15 feet). If permanent seeding is not placed where indicated within 20 days after completion of earthwork, place temporary seeding (Annual Ryegrass) and mulching on disturbed areas.

(h) Control grading areas by placing erosion and sediment pollution control devices in advance of performing earthwork activities. Place stabilization devices as earthwork activity progresses.

(i) If excavated material is stockpiled more than 20 days, take interim stabilization measures to minimize erosion of stockpile slopes.

(j) Clean sedimentation structures as specified in Section 861.

(k) Separate water originating outside of the project from that originating within.

(l) Be responsible for maintenance of erosion and sediment pollution control devices.

(m) Seed and mulch borrow and waste areas as specified in Section 105.14.

II. Stage, sequence and schedule earthmoving activities to meet the requirements found in the Project Specific Details.

00 - a01900 TRAIN INFORMATION (DAILY)

Addendum: 2

Associated Item(s):

Header:
TRAIN INFORMATION (DAILY)

Provision Body:

S.R.	Railroad	Speed	# of Trains	# of Tracks	Type of Line
2020	AMTRAK	130 MPH	80	4	Passenger
2020	CONRAIL	30 MPH	4	4	Freight

G1902A - a01902 INSURANCE--GENERAL APPLICATION-ADDITIONAL COVERAGE LIMITS

Addendum:

Associated Item(s):

Header:
INSURANCE--GENERAL APPLICATION-ADDITIONAL COVERAGE LIMITS

Provision Body:

I. Name and Address of the Railroad as found in the Project Specific Details, Detail 1(***see below***).

II. GENERAL.

(a) In addition to any other forms of insurance or bonds required under the terms of the contract and specifications, provide and carry Railroad's Protective Public Liability Insurance in the specified amounts. Also, submit a properly executed Insurance Certificate evidencing the issuance of adequate Contractor's Public Liability and Property Damage Insurance with the executed contract when it is returned to the Department.

(b) Carry the specified insurance from the time physical work is started until all physical work required to be performed under the terms of the contract is substantially completed. Failure to carry or keep such insurance in force until all work is substantially completed will constitute a violation of the contract and in such event, the Secretary may avail himself of the remedies provided under Section 108.08.

(c) Furnish to the railroad company a signed copy of the policy for Contractor's Public Liability and Property Damage Insurance and the signed original policy for Railroad's Protective Public Liability Insurance prior to entry upon railroad right-of-way. If any work is subcontracted, also furnish to the railroad a signed copy of the policy for Contractor's Protective Public Liability and Property Damage Insurance.

III. RAILROAD'S PROTECTIVE PUBLIC LIABILITY INSURANCE.

Furnish the Department evidence that, with respect to the operations the Contractor or any subcontractors perform, provide Railroad Protective Public Liability Insurance in the name of the Railroad found in the Project Specific Details, Detail 1 providing coverage for bodily injury, death, and property damage limited to a combined single limit of not less than five million dollars ($5,000,000) per occurrence with an aggregate limit of not less than ten million dollars ($10,000,000) for the term of the policy.

IV. CONTRACTOR'S PUBLIC LIABILITY AND PROPERTY DAMAGE INSURANCE.

In accordance with Sections 103.06 and 107.14, carry regular Contractor's Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000).

V. CONTRACTOR'S PROTECTIVE PUBLIC LIABILITY AND PROPERTY DAMAGE

If any work is subcontracted, furnish evidence to the Department that regular Contractor's Protective Public Liability and Property Damage Insurance of not less than two million dollars ($2,000,000) is carried, in the Contractor's behalf.

Project Specific Details:
1. The Proper Name and Address of the Railroad as referred to in Para I is:

G2201A - a02201 RAILROAD COMPANY CONTACT PERSON

Addendum:

Associated Item(s):

Header:

RAILROAD COMPANY CONTACT PERSON

Provision Body:

Contact the following railroad company representative to request protective services required by the special provision entitled "Maintenance and Protection of Railroad Traffic":

AMTRAK:

For Insurance requirements:

Charlie MeGloughlin, RA

Project Development officer

30 th Street Station

Phone: (215) 349-4971

For Railroad Protective Services:

Barry Bonds

Field Engineer

30 th Street station

Phone: (215) 651-3289

G2301A - a02301 MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Addendum:

Associated Item(s):

Header:
MAINTENANCE AND PROTECTION OF RAILROAD TRAFFIC

Provision Body:

I. Make the safety and operation continuity of the railroad company traffic of the first importance. At all times protect and safeguard such traffic and arrange project work accordingly. Whenever the work may affect the safety and movement of trains, submit the method of doing such work to the chief engineer of the railroad company or duly authorized representative for approval. Do not begin or prosecute work without such approval. However, the approval of the railroad company's chief engineer or duly authorized representative will not be considered as a release from responsibility for any damage to the railroad company by the acts of the Contractor or those of his/her employees. Prepare and submit plans for approval to the railroad company's chief engineer for all work, including, but not limited to, tunneling under tracks, sheeting, shoring, and erection in the vicinity of and over tracks.

II. During the construction period, the railroad company and the Department will co-operate with each other in the protection of their respective traffic and in the construction as indicated. Give the chief engineer of any involved railroad fourteen (14) days written notice before any work is started on railroad property, in order that the necessary arrangements may be made to properly protect railroad traffic.

III. The railroad company will provide all watchmen, operators, flagmen, clearance men, and similar protective services, considered by the railroad company's chief engineer or his duly authorized representative as necessary to insure the safety of trains contingent upon the project's operations, at the sole expense of the Department. It is agreed, however, that providing of such

watchmen, and other precautions, will not relieve liability of payment for damage caused by project operations. The Department will not be responsible for such damage.

IV. It is expressly understood that this contract includes no work for which the railroad company is to be billed. Therefore, do not bill the railroad company for any work which may be performed unless the railroad company gives a written request that such work be performed at its expense.

V. The raising or surfacing of tracks due to any settlement, caused by the project operations will be performed by the railroad, but the cost will be borne entirely by Contractor.

VI. During construction a minimum overhead clearance of 6.7m (7m for electrical tracks) (22 feet (23 feet for electrical tracks)) above the top of rail and a minimum horizontal clearance of 12 feet from centerline of tangent track will be permitted. If the clearances indicated are less than those stated above, then the lesser clearance will be permitted. In any case, this minimum side clearance applies to tangent track only. For curved track, provide additional minimum side clearance to compensate for curvature. Contact the railroad company's chief engineer to ascertain the amount of additional minimum side clearance required. If at any time during construction it is decided that project operations require overhead and/or side clearances less than the minimum stated or indicated submit a request to the railroad company's chief engineer as outlined above for safety and continuity of railroad operations. Deviate from those minimums stated above or indicated, only upon receipt of approval of such a request.

VII. Do not work over any high tension wires or within 10 feet on each side and below such wires. When it is necessary to work or place equipment within these limits, make arrangements with the railroad to furnish electrical clearance men and de-energize the wires contingent upon railroad operation. Where voltage exceeds 50,000 volts, increase this working clearance.

G2401A - a02401 RAILROAD PROTECTIVE SERVICES COSTS

Addendum:

Associated Item(s):

Header:
RAILROAD PROTECTIVE SERVICES COSTS

Provision Body:

I. The Department will make payment to the railroad for all costs associated with watchmen, operators, flagmen, clearance men, and similar protective services provided by the railroad company based on railroad regulations and the Contractor's construction schedule.

II. Actual costs will be assessed by the Department whenever protective services are provided by the railroad at the request of the Contractor, but if such requested services are not utilized due to a change in the Contractor's construction schedule or if it is determined by the Department that the requested services were not necessary, the actual costs to be assessed by the Department against the Contractor will be the amount billed by the railroad to the Department.

III. It will be the Contractor's responsibility to obtain the protective services from the railroad and the Department assumes no liability for any delays caused by the failure of the Contractor to obtain such services.

IV. The actual costs to be assessed above will be deducted from money due or that becomes due the Contractor.

G3401A - a03401 PREVAILING WAGE ACT

Addendum:

Associated Item(s):

Header:
PREVAILING WAGE ACT

Provision Body:

Submit bids on this project in compliance with the Pennsylvania Prevailing Wage Act, as specified in Section 107.22. If that Act or any portion thereof is finally determined by a court to be invalid and unenforceable, any savings realized by the Contractor as a result of such invalidation accrue to the benefit of the Department or its designee. The prospective bidder agrees, by submitting this bid, to make payroll records available for audit by the Department. In the event that the bidder fails to afford the Department or its designee the benefit of any savings realized under this paragraph the Department will have the right to withhold payments from this or any other contract in an amount equal to the savings realized plus interest.

G3501B - a03501 RECIPROCAL LIMITATIONS ACT REQUIREMENTS FOR CONSTRUCTION

Addendum:

Associated Item(s):

Header:
RECIPROCAL LIMITATIONS ACT REQUIREMENTS FOR CONSTRUCTION

Provision Body:

I. REQUIREMENTS AND DISCRIMINATING STATES -

(a) States Which Apply Preference Favoring In-State Bidders. The Reciprocal Limitations Act, Act 146 of 1986, requires the Commonwealth agencies to give resident bidders a preference against a nonresident bidder from any state that gives or requires a preference to bidders from that state. The amount of the preference will be equal to the amount of the preference applied by the state of the nonresident bidder. The following is a list of the states which have been found by the Commonwealth agencies to have applied a preference for in-state bidders and the amount of the preference:

STATE PREFERENCE

1. Arizona 5% (construction materials from Arizona
resident dealers only)
2. Montana 3%
3. Wyoming 5%

(b) States Which Prohibit Use of Out-of-State Goods, Supplies, Equipment, or Materials. The Reciprocal Limitations Act also requires that the Commonwealth agencies not specify, use, or purchase any goods, supplies, equipment, or materials which are produced, manufactured, mined, or grown in any state that prohibits the specification, use, or purchase of such items in or on its public buildings or other works, when such items are not produced, manufactured, mined, or grown in that state. The following is a list of the states which have been found by the Commonwealth agencies to have prohibited the use of out-of-state goods, supplies, equipment, materials, or bidders and the type of prohibition:

STATE PROHIBITION

1. Georgia Forest Products Only
2. New Mexico Construction
3. New Jersey Chain Link Fence, Portable Sanitation Units, Storage
Batteries, Hardware Supplies, Fasteners, Lumber,
Building Supplies

If a bid discloses that the bidder is offering to supply the above listed products from the states listed above, it will be rejected. Contractors are prohibited from supplying these items from these states.

II. CALCULATION OF PREFERENCE -

In calculating the preference, the amount of a bid submitted by a Pennsylvania resident bidder will be reduced by the percentage preference which would be given to a nonresident bidder by its state of residency, only for the purpose of determining the apparent low bidder.

III. FOREST OR LUMBER PRODUCTS -

If the project requires the Contractor to provide forest or lumber products for the construction of the project, certify that the lumber or forest products which will be provided were not grown or harvested in a state or foreign country listed in paragraph I.(b) above. Failure to certify, may result in the rejection of the bid.

G4251A - a04251 UTILITIES--USE WHEN THERE ARE UTILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT AFFECTED

Addendum:

Associated Item(s):

Header:
UTILITIES--USE WHEN THERE ARE UTILITIES WITHIN THE PROJECT LIMITS THAT ARE NOT AFFECTED BY THE PROJECT SCOPE OF WORK

Provision Body:

Utilities within the project limits are not affected by the scope of work defined for this project. Although no adjustments or relocations are anticipated, identify and coordinate with utilities and/ or municipalities within the limits of work. Arrange for field location markings of these facilities before performing any excavation, drilling, and/or driving.

G4802A - a04802 INDEX PRICE FOR DIESEL FUEL

Addendum:

Associated Item(s):

Header:
Index Price for Diesel Fuel

Provision Body:

The index price for diesel fuel (FB), as determined by the Department, is **$3.05 Per Gallon**. Use this index price in accordance with Section 110.12 PRICE ADJUSTMENT FOR DIESEL FUEL COST FLUCTUATIONS.

G4901A - a04901 PRICE INDEX FOR ASPHALT CEMENT

Addendum:

Associated Item(s):

Header:
PRICE INDEX FOR ASPHALT CEMENT

Provision Body:

The price index for asphalt cement (PG 64-22), as determined by the Department is **$ 594.00 Per Ton**. Use this price index in accordance with Section 110.04 PRICE ADJUSTMENT OF BITUMINOUS MATERIALS.

G4902C - a04902 PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Addendum:

Associated Item(s):

Header:
PRICE ADJUSTMENT FOR STEEL COST FLUCTUATIONS

Provision Body:

These requirements provide for a price adjustment, in the form of a payment to the Contractor or a rebate to the Department, for fluctuations in the cost of the steel used in the applicable materials placed as part of the construction work specified in Sections 620, 621, 948, 1002, 1005, 1050, 1056, 1080, and 1085.

(a) General. These price adjustment provisions apply to items in the contract Schedule of Prices, as specified above, including any modified standard or non-standard item where the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Additionally, items in the Component Item Schedule (CIS) for an "as-designed" or alternate design structure, as well as work performed under a design-build contract, will be included when applying the specified price adjustment requirements, provided the work to be performed includes incorporation of one or more of the applicable steel materials specified in the above Sections and addressed herein. Terminal sections, end treatments, transitions, and transition treatments associated with guide rail and metal median barrier work; as well as mechanical splice systems, pile tip reinforcement, high load multi-rotational bearings, shear connectors, and scuppers; will not be subject to the price adjustment criteria and conditions specified herein.

To elect to have these price adjustment provisions apply to one or more of the steel product categories identified herein, when planned for incorporation into a specific project, advance notification must be submitted to the Department. The apparent low bidder is required to submit the Steel Escalation Option form attached to the proposal, via fax, to (717) 705-1504, or email to steeloptions@pa.gov by 3:00 pm prevailing local time within 7 calendar days after the bid opening. When the seventh calendar day after the bid opening falls on a day PENNDOT offices are closed, submit the Steel Escalation Option form by 3:00 pm prevailing local time on the next business day. If a properly completed Steel Escalation Option form is not provided by the apparent low bidder within the time specified, the Department will consider the option to apply these price adjustment provisions to the project to be declined. Furthermore, if a Steel Escalation Option form, when provided within the specified time, has been completed such that the Department is unable to ascertain the bidder's intention with regard to the inclusion of any one of the applicable steel product categories, the Department will consider the option to apply these price adjustment provisions to that product category to be declined. No further opportunity to elect steel escalation for the project or an individual steel product category will be made available. In the event the apparent low bid is rejected, the next lowest bidder will be notified to submit the Steel Escalation Option form by 3:00 pm prevailing local time within 7 calendar days after notification.

The Department posts a monthly index price for steel ($ per ton) based on data obtained from the U.S. Department of Labor (USDOL), Bureau of Labor Statistics, which publishes monthly Producer Price Index (PPI) values for various commodities. The statewide index price for steel will be based on the PPI value posted by USDOL for "Semi-finished Steel Mill Products" (Series ID: WPU101702). The Department will post its monthly index price for steel after the USDOL lists the PPI value on which it is based as final.

The "base / benchmark" index price, SB, will be the steel index price posted by the Department, determined as specified above, for the month in which project letting occurred.

The "invoice" index price, SI, will be the steel index price posted by the Department, determined as specified above, for the month in which applicable steel material is invoiced.

Steel material will be considered invoiced as of the date when an invoice from the steel mill providing the necessary raw material is sent to the Contractor or to a subcontractor, fabricator, manufacturer, or supplier. The steel price adjustment provisions specified

herein are not applicable to raw steel material having a mill invoice date that precedes the project letting date. On a quarterly basis, provide documentation of the invoice date for applicable steel material incorporated into the work during the prior 3-month period. Documentation is to be in the form of a tabulation that lists all material invoiced during the period, in chronological order by invoice date; the quantity invoiced; and the applicable contract item(s) and corresponding project location(s) where the invoiced quantity or portion thereof was incorporated, along with copies of supporting invoices. Have a representative of the Contractor, authorized to make such statements, certify that the information provided in the tabulation is complete and accurate and may be relied upon by the Department.

Failure to provide the required tabulation within 10 calendar days of the end of each, applicable 3-month period will result in the Department computing a price adjustment (rebate or increase) using a value for SI that results in the greatest possible price rebate or least possible price increase based on the monthly index prices posted by the Department, to date, since work on the project began.

(b) Price Adjustment Criteria and Conditions. The following criteria and conditions will be considered in determining a price adjustment for steel cost fluctuations.

1. No Price Adjustment. When the ratio SI/SB falls within the range of 0.95 to 1.05, no price adjustment will be made for applicable steel material having an invoice date that falls within the month for which the SI index price was posted.

2. Price Rebate. When the ratio SI/SB is calculated to be less than 0.95, the Department will receive an automatic price rebate, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.R. = (0.95 - SI / SB) (SB) (ST)$$

where:

P.R. = Price Rebate

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.*

*Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

3. Price Increase. When the ratio SI/SB is calculated to be greater than 1.05, the Contractor will receive a price increase, for applicable steel material having an invoice date that falls within the month for which the SI index price was posted, to be determined in accordance with the following formula:

$$P.I. = (SI / SB - 1.05) (SB) (ST)$$

where:

P.I. = Price Increase

SI = Index price for the month in which applicable steel material is invoiced.

SB = Index price for the month in which project letting occurred.

ST = Quantity (tons) of applicable steel material incorporated into the work during the applicable 3-month period.*

* Computed based on the quantity paid, under applicable contract items, on current estimates processed during the 3-month period addressed in the tabulation provided by the Contractor. Not to exceed the total tonnage of applicable

steel material invoiced during the month for which the SI index price was posted, as shown on the Contractor's tabulation.

4. Equivalent Tonnage. For applicable steel material furnished under a separate contract item, under a design-bid-build contract, or under a design-build contract the equivalent steel tonnage will be computed as indicate in the following sections.

For design-build contracts, provide an itemized breakdown of the applicable steel materials addressed herein incorporated into the work and indicate the quantity of each actually installed. Indicated quantities should be based on field measurements or take-offs from the approved plans or shop drawings and be equivalent to those used to compute payments made against the Lump Sum construction item on current estimates.

4.a Guide Rail and Metal Median Barrier. For applicable guide rail and metal median barrier components (i.e. rail elements, posts, and rubbing rail) furnished under separate contract items or as part of a single contract item for guide rail / metal median barrier complete in place, the equivalent steel tonnage is computed as follows:

4.a.1 Guide Rail or Median Barrier Rail Element (Weak Post or Strong Post).

Steel Tonnage (ST) = 7.84 (Q) / 2000

where:

Q = Quantity (linear feet) of weak post or strong post guide rail element paid on current estimates processed during the applicable 3-month period

4.a.2. Type 2W Posts.

Steel Tonnage (ST) = 8.67 (L) (Q) / 2000

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2W posts paid on current estimates processed during the applicable 3-month period.

4.a.3 Type 2S Posts.

Steel Tonnage (ST) = 9.17 (L) (Q) / 2000

where:

L = Length of each post (feet) as required by the Standard Drawings or as specified

Q = Quantity (each) of Type 2S posts paid on current estimates processed during the applicable 3-month period

4.a.4 Rubbing Rail.

Steel Tonnage (ST) = 8.56 (Q) / 2000

where:

Q = Quantity (linear feet) of rubbing rail paid on current estimates processed during the applicable 3-month period

4.b Reinforcement Bars. For applicable reinforcement bars furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent steel tonnage is computed as follows:

Steel Tonnage (ST) = (Q) / 2000

where:

Q = Quantity (pounds) of reinforcement bars paid on current estimates processed during the applicable 3-month period.

4.c Piles. For applicable steel beam bearing piles, cast-in-place concrete bearing piles, cast-in-place concrete piles, and steel pipe piles, furnished under a separate contract item, as a component item associated with an alternate design structure, or as a component item associated with a design-build contract, the equivalent tonnage is computed as follows:

4.c.1 Steel H-Piles.

Steel Tonnage (ST) = (UW) (Q) / 2000

where:

UW= Unit Weight of the Steel Beam* (pounds per foot)

Q = Quantity (linear feet) of steel piles paid on current estimates processed during the applicable 3-month period.

* The unit weight of steel will be the second of the two numbers associated with the size designation for the beam as cited in the item description (i.e. If the item description is "Steel Beam Bearing Piles, HP12x74", the unit weight of the steel is 74 pounds per foot).

4.c.2 Cast-in-Place Concrete Piles.

Steel Tonnage (ST) = 2.80 (D) (Q) / 2000

where:

D = Diameter of the steel shell (inches)*

Q = Quantity (linear feet) of cast-in-place concrete piles paid on current estimates processed during the applicable 3-month period.

* From the approved structure Plans or field measurements. For cylindrical shells of varying diameter, a weighted average diameter will be used, computed based on the number of shells of each diameter actually installed. For tapered shells, an average diameter will be used, computed as the average of the shell diameters at the butt end and at the tip.

4.c.3 Pipe Piles.

Steel Tonnage (ST) = 6.70 (D) (Q) / 2000

where:

D = Diameter of the steel pipe (inches)*

Q = Quantity (linear feet) of pipe piles paid on current estimates processed during the applicable 3-month period.

* From the approved structure Plans or field measurements.

4.d Steel Sign Structure. For applicable steel sign structures constructed under a separate contract item, the equivalent tonnage is computed as follows:

Steel Tonnage (ST) = (Q) / 2000

where:

Q = Quantity (pounds) of steel in each sign structure, or portion thereof, paid on current estimates processed during the applicable 3-month period.*

*Not to exceed the estimated weight of each sign structure as indicated on the structure Plans.

4.e Fabricated Structural Steel. For applicable fabricated structural steel; furnished under a separate contract item, as a component item associated with an "as-designed" or alternate design structure, or as a component item associated with a design-build contract; the equivalent tonnage is computed as follows:

Steel Tonnage (ST) = (Q) / 2000

where:

Q = Quantity (pounds) of fabricated structural steel girders, rolled beams, angle, and plate paid on current estimates processed during the applicable 3-month period.

4.f Precast Reinforced Concrete Box Culverts and Prestressed Concrete Bridge Beams. For applicable precast reinforced concrete box culvert segments and prestressed concrete bridge beams; furnished under a separate contract item, as a component item associated with an "as- designed" or alternate design structure, or as a component item associated with a design- build contract; the equivalent tonnage is computed as follows:

Steel Tonnage (ST) = (UW)(Q)/2000

where:

UW= Unit Weight (pounds per foot) of reinforcing steel in a box culvert segment or of reinforcing steel and prestressing strands in a prestressed bridge beam.*

Q = Quantity (linear feet) of precast reinforced concrete box culvert segments and prestressed concrete bridge beams paid on current estimates processed during the applicable 3-month period.

* Submit documentation indicating the weight (pounds) of reinforcing steel included in and the length (feet) of each box culvert segment, and the weight (pounds) of mild reinforcing steel and prestressing strands included in and the length (feet) of each prestressed bridge beam. UW will be computed as the average of the unit weight of steel (i.e. weight of steel divided by length) in each box culvert segment, or as the average of the unit weight of steel (i.e. weight of steel divided by length) in each prestressed bridge beam. Documentation must be submitted at the time required shop drawings are submitted for approval.

5. Payment/Rebate. The price adjustment will be paid, or rebated, upon approval of a contract adjustment to be prepared on a quarterly basis as applicable work is completed. Cumulative quarterly price adjustments amounting to less than $1,000 will be disregarded.

6. Expiration of Contract Time. When eligible materials are purchased after expiration of contract time and liquidated damages are chargeable, the value for SI used to compute the price adjustment will be either the index price for the month in which applicable steel material is invoiced or the index price at the time contract time expired, whichever is less.

7. Final Quantities. Upon completion of the work and determination of final pay quantities, a final contract adjustment may be prepared to reconcile any difference between estimated quantities previously paid and the final quantities. In this situation, the value for SI used in the price adjustment formula will be the average of all SI values previously used for computing price adjustments.

8. Inspection of Records. The Department, through the Office of Inspector General, reserves the right to inspect the records of the prime contractor and its subcontractors and material fabricators and suppliers to ascertain actual invoicing dates and quantity information for the steel material used in the performance of applicable items of work.

9. Extra Work. When applicable items of work, as specified herein, are added to the contract as Extra Work, in accordance with the provisions of Section 110.03, no price adjustment will be made for fluctuations in the cost of the steel used in manufacturing the materials placed during performance of the extra work. The current price for steel is to be used when preparing required backup data for extra work to be performed at a negotiated price. For extra work performed on a force account basis,

reimbursement of actual material costs, along with the specified overhead and profit markup, will be considered to include full compensation for the current cost of steel.

G7022A - a07022 CHANGES TO SPECIFICATION: SECTION 107

Addendum:

Associated Item(s):

Header:
CHANGES TO SPECIFICATIONS: SECTION 107

Provision Body:

SECTION 107 - Legal Relations and Responsibility to the Public

- Section 107.30(a)1. Revise to read as follows:

1. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity, as required by Executive Order 11246 and Executive Order 11375, are set forth in Required Contract Provisions (Form FHWA-1273, except V. 2.b. revise first sentence to read as follows: the payroll records shall contain the name; an individually identifying number [e.g., the last four digits of the employee's social security number]; his or her correct classification; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid) and these requirements; imposed pursuant to 23 U.S.C. 140, as established by Section 22 of the Federal-Aid Highway Act of 1968. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-43 and the provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. The requirements set forth herein constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

G7037D - a07037 CHANGES TO SPECIFICATIONS: SECTIONS 106, 108, 514, 515, 516, 676, AND 1107

Addendum:

Associated Item(s):

Header:
Changes to Specifications: Sections 106, 108, 514, 515, 516, 676, and 1107

Provision Body:

SECTION 106—CONTROL OF MATERIAL

- **Section 106.01 General.Revise to read as follows:**

106.01 GENERAL—Use material complying with the requirements of these specifications. At the pre-construction conference, submit a list of material to be sampled and tested by the Contractor and a list of material to be sampled and tested by the Department.

Comply with the provisions of the Pennsylvania Trade Practices Act, 71 P.S. Section 773.101, et seq., concerning the purchase of aluminum and steel products produced in a foreign country. On Federal-Aid projects, also comply with the provisions specified in Section 106.10.

Comply with the provisions of the Steel Products Procurement Act, 73 P.S. Section 1881, et seq. in the performance of the contract or any subcontract.

Following contract execution, furnish to the Department a complete statement of the project construction material's origin, composition, and manufacture.

For Fabricated Structural Steel materials, as identified in Section 1105.01(a) and inspected in accordance with Section 1105.01(e), and any other fabricated aluminum, precast or prestressed concrete products inspected during manufacturing, stamped and approved for shipment by the Department's Representative, furnish Form CS-4171 to the Inspector-in-Charge. Certified mill test reports for any steel included will be reviewed by the Department's Inspector and retained by the fabricator.

For all other steel products or products containing steel that will serve a permanent functional use in the project, provide the Inspector-in-Charge the following when the product is delivered to the project site:

- For any "identifiable" steel products, certification that Section 4 of the Steel Products Procurement Act, 73 P.S. Section 1884, has been complied with. Identifiable steel products are steel products which contain permanent markings which indicate the material was both melted and manufactured in the United States.
- For all other "unidentifiable" steel products, documentation such as invoices, bills of lading, and mill certification that positively identify that the steel was melted and manufactured in the United States.

The provisions of the Steel Products Procurement Act will not be waived unless the Secretary has determined, under authority granted in Section 4(b) of the act, that a certain steel product or products is not produced in the United States in sufficient quantities to meet contract requirements. Such a determination will be set forth in a proposal for the Department's review and response. Include with the proposal a comprehensive list of sources, including names and contact information, for verification. The Secretary does not have the authority to waive the provisions specified in Section 106.10.

Steel products are defined as products rolled, formed, shaped, drawn, extruded, forged, cast, fabricated, otherwise similarly processed, or processed by a combination of two or more of these operations from steel made in the United States by the open hearth, basic oxygen, electric furnace, Bessemer, or any other steel-producing process. Included are cast iron products and machinery and equipment as listed in United States Department of Commerce Standard Industrial Classification 25, 35, and 37 and made of, fabricated from, or containing steel components. If a product, as delivered to the project, contains both foreign and United States steel, such product is considered to be a United States steel product only if at least 75% of the cost of the articles, materials, and supplies have been mined, produced, or manufactured, as the case may be, in the United States. On Federal-Aid projects, comply with the provisions specified in Section 106.10.

No payment will be made on the contract if unidentified steel products are supplied, until the hereinbefore requirements are met.

Any payments made that should not have been made may be recoverable from a manufacturer or supplier as well as from a contractor or subcontractor.

Any person who willfully violates the Steel Products Procurement Act will be prohibited from submitting bids for any contract for a period of 5 years from the date of determination that a violation has occurred. If a subcontractor, manufacturer or supplier, violates the Steel Products Procurement Act, such person will be prohibited from performing any work or supplying any materials to the Department for a period of 5 years from the date of determination that a violation has occurred.

If steel products are used as a construction tool or appurtenance and will not serve a permanent functional use in the project, compliance with the Steel Products Procurement Act is not required.

When standard manufactured items are specified and these items are identified by unit mass (unit weight), section dimensions, or similar characteristics, their identification will be considered to be nominal masses (weights) or dimensions. Unless more stringently controlled by specified tolerances, industry established manufacturing tolerances will be accepted.

SECTION 108—PERFORMANCE AND PROGRESS

- **Section 108.07(a) Construction Engineering Liquidated Damages. Revise to read as follows:**

(a) Construction Engineering Liquidated Damages . For each day that any physical work remains uncompleted after the Required Completion Date, the sum per day specified in the following schedule, unless otherwise stated in the proposal, will be deducted from money due or to become due. This deduction will not be as a penalty, but as Construction Engineering Liquidated Damages.

Original Contract Amount		Schedule of Daily Charges For Construction Engineering Liquidated Damages
From More Than	To and Including	Per Calendar Day
$ 0	$ 400,000	$ 825
400,000	1,000,000	1,535
1,000,000	5,000,000	2,085
5,000,000	10,000,000	3,280
10,000,000	15,000,000	4,285
15,000,000		5,660

In the event the Contractor is declared in default, as specified in Section 108.08, Construction Engineering Liquidated Damages will be charged as provided by this section. If the total amount chargeable as Construction Engineering Liquidated Damages exceeds the amount payable to the Contractor or the surety, the excess is to be paid to the State by the Contractor or the surety.

SECTION 514—DIAMOND GRINDING OF CONCRETE PAVEMENT

- **SECTION 514.3(e) Concrete Pavement Rehabilitation. Revise to read as follows:**

(e) Concrete Pavement Rehabilitation. Concrete pavement repairs including concrete pavement patching, concrete spall repair, dowel retrofit, slab stabilization, and slab jacking must be completed before the start of any diamond grinding operations.

After completing the concrete rehabilitation operation, determine the ride quality of the existing pavement in accordance with Section 507.3(a) and Section 507.3(b), before performing any diamond grinding. After completing the diamond grinding operations, reevaluate the ride quality of the pavement surface according to Section 507.3(a) and Section 507.3(b). Use the same pavement surface profile measuring equipment to perform all ride quality evaluations on the project.

After diamond grinding the pavement surface, provide a maximum IRI of 70 in/ mile for facilities where posted speed limits are greater than 45 miles per hour, and a maximum IRI of 90 in/mile for facilities where posted speed limits are less than or equal to 45 miles per hour. Meet these requirements in all IRI lots where diamond grinding of the pavement was performed to receive payment.

1. Lots. A full lot is 528 feet of a single lane. The Representative will designate lots starting at the beginning ride quality limit and continuing to the ending ride quality limit for each pavement lane and ramp that is 12 feet or wider. Do not include the length of excluded areas in the 528 feet. Excluded areas will consist of; bridge decks, ramps less than 1,500 feet,in length, tapered

pavements less than 12 feet wide, partial lots less than 100 feet in length, shoulders, medians, and other pavement surfaces as indicated.

SECTION 515—SAWING AND SEALING OF BITUMINOUS OVERLAYS

- **SECTION 515.3(b) Sawing. Revise to read as follows:**

(b) Sawing. Make all saw-cuts directly above the existing transverse joints within ± 1 inch. Saw-cuts which do not meet this tolerance will be declared defective as outlined in Section 105.12. Do not saw cut until the bituminous course has cooled below 140F. Perform saw cutting within 7 days after placing the wearing course. Perform this work on all finished overlay areas before discontinuing work due to seasonal paving limitations.

Make saw-cuts only in the lane in which the existing joint is located. Extend the saw-cuts through any existing widening. Provide separate saw-cuts in each lane if existing transverse joints are offset more than 1 inch.

Use the following table to determine saw-cut reservoir size:

Overlay Thickness	**Reservoir**
inches	**inches**
≤1 1/2	1/2 deep by 1/2 wide
>1 1/2	1 deep by 1/2 wide

Additionally, if the total depth of overlay is 3 1/2 inches or greater, make an initial saw-cut 1/8 inch wide to a depth of 1 1/2 inches or one-third of the total overlay thickness, whichever is greater. Indicated overlay depths do not include scratch or leveling courses less than 1 inch.

If wet sawing, immediately flush the reservoir with water.

If not placing the wearing course within the same construction season, provide a 1/8-inch wide saw-cut in the last placed bituminous course to a minimum depth of 1 inch or one-third the thickness of the bituminous material placed, whichever is greater.

SECTION 516—CONCRETE PAVEMENT PATCHING

- **SECTION 516—Description. Revise to read as follows:**

516.1 DESCRIPTION—This work is the construction of single course, full depth, normal strength or accelerated strength, cement concrete pavement patches. Do not patch less than one lane width. If diamond grinding is to be performed, test the pavement surface in the longitudinal direction as specified in Section 514.3(d)2.

(a) Patching Joint. Provide full depth saw-cuts at the existing pavement/patch interface, install load transfer dowels in the transverse faces of the existing pavement, construct a sealant reservoir, and seal the joint.

(b) New Pavement Joint. Provide load transfer unit, construct sealant reservoir, and seal the joint.

(c) Normal and Accelerated Concrete Pavement Patching, Type A. Construct patches between 6 feet and 20 feet long.

(d) Normal and Accelerated Concrete Pavement Patching, Type B. Construct patches between 20.1 feet and 65 feet long.

(e) Normal and Accelerated Concrete Pavement Patching, Type C. Construct patches between 65.1 feet and 500 feet long.

- **Section 516.2(a) – Cement Concrete—Class AA. Revise to read as follows:**

(a) Cement Concrete—Class AA. Section 704

- **Section 516.2(g) Concrete Curing Materials. Revise to read as follows:**

(g) Concrete Curing Materials. For normal strength concrete, use Section 711.1(a), (b), (c), (d), and (e); or Section 711.2(a), Type 2.

For accelerated strength concrete, use Section 711.1(b) and Section 711.2(a), Type 2, or 711.2(b).

- **Section 516.2(j) Tape Bond Breaker. Revise to read as follows:**

(j) Tape Bond Breaker. An approved self adhesive tape.

- **Section 516.2(k) Anchor Material. Revise to read as follows:**

(k) Anchor Material. An approved adhesive anchoring material listed in Bulletin 15.

- **Section 516.3(a) General. Revise to read as follows:**

(a) General. Prepare a QC Plan as specified in Section 106.03(a)2.a and submit it for review. The QC Plan must describe appropriate action points for all phases of construction, including concrete mixing and curing, joint sawing and sealing, and sampling and testing for opening to traffic. If patching adjacent lanes, construct concrete pavement patches one lane at a time where two lane width construction would interfere with traffic. The Representative will surface mark patch areas in advance of the sawing operations.

Protect traffic from drop off conditions as specified in Section 901.3(j). Do not allow excavated patch areas to remain un-patched for more than 2 calendar days or over weekends or holidays.

If it rains while the patch area is open, excavate an outlet through the shoulder at the lowest point of the patch as directed. Repair any damage to the existing shoulders as a result of this work, at no expense to the Department. After saw cutting the existing pavement, allow traffic on patch areas of existing pavement for a maximum of 72 hours. Do not allow saw cuts in excess of 1/2 inch in width to be opened to traffic.

For normal strength patches, do not place concrete if the air temperature falls below 40F. For accelerated strength patches, do not place concrete if the air temperature falls below 45F. Before placing concrete, ensure adequate equipment and trained personnel are available, and sufficient hauling units scheduled, to maintain continuity in placement.

- **Section 516.3(b) Saw Cutting. Revise to read as follows:**

(b) Saw Cutting. Use a saw equipped with a diamond-tipped blade, a blade guard, alignment guides, water cooling system, and cut-depth controls for saw cutting the perimeter of the patch. Do not allow cooling water, slurry, and dust from the sawing operation to enter any lane opened to traffic. Make all required full depth longitudinal saw cuts along the perimeter of the patch prior to making any full depth transverse saw cuts.

Where only one lane is being patched, make a full depth saw-cut in the existing longitudinal joint for the full length of the patch. Where multiple lanes are being patched one lane at a time, perform one of the following:

- Make a full depth saw-cut within the adjacent lane to be patched. Make the saw-cut parallel and not more than 1 foot from the existing longitudinal joint. Form the patch joint in the same location as the existing longitudinal joint and backfill behind the forms with aggregate at no additional cost to the Department.

- Make a full depth saw-cut in the existing longitudinal joint for the length of the patch and insert a temporary rigid separator between the adjacent lane and the patch area. Do not use a temporary rigid separator greater than 1/8 inch thick.

Make full depth transverse saw-cuts at the locations marked on the pavement surface. Do not break back the underside of the existing pavement. If break back or spalling occurs, make a new full depth transverse saw-cut beyond the area of break back or spalling. Place the additional length of patch at no expense to the Department. If break back or spalling occurs in the adjacent lane, repair the damaged area at a minimum with a full depth Type A concrete patch at no additional expense to the Department. Full depth saw cuts at the patch limits will be allowed to extend transversely into the adjacent pavement up to full depth + 2 inches provided dowel bars in the adjacent lane are not damaged. Additional full depth transverse saw cuts will be allowed to facilitate slab removal but may not extend transversely into the adjacent pavement to remain in place.

- **Section 516.3(c) Removal of Existing Pavement. Revise to read as follows:**

(c) Removal of Existing Pavement. Remove concrete between narrowly spaced saw-cuts at the end of a proposed patch area in a manner that does not damage any adjacent pavement that is to remain in place.

As an alternate, a wheel saw having carbide steel tips may be used before making the full depth transverse saw-cuts necessary for the patching joint. Limit penetration of the wheel to minimize disturbance to the subbase. Do not allow wheel saws with carbide steel tips to cut into pavement that is to remain in place. Discontinue using a wheel saw if unsatisfactory results are obtained as determined by the Representative.

Remove the concrete in the patch area in one or more pieces minimizing disturbance to the subbase, subgrade, and the adjacent pavement to remain in place. Do not use drop hammers or hydro hammers. If damage occurs to pavement to remain in place, repair as specified in Section 516.3(b) at no additional cost to the Department.

If the surface of the subbase is disturbed by the removal technique, recompact the surface using small vibratory compactors. If the disturbed material is deeper than 1 inch, remove the disturbed material with hand tools and replace with concrete during paving at no expense to the Department.

Correct all subbase surface irregularities exceeding 1 inch in depth by loosening the surface and removing or adding material as required. Compact the corrected area and surrounding surface by rolling to proper grade and slope.

- **Section 516.3(j) Curing of Concrete. Revise to read as follows:**

(j) Curing of Concrete. For normal strength patches, immediately after finishing operations have been completed, cover and cure the patch surface as specified in Section 501.3(l).

For accelerated patches, cure concrete as specified in Section 501.3(l)1.b or using approved curing insulation materials. Apply white membrane-forming curing compound as specified in Section 501.3(l)1.c. The Contractor may use black membrane-forming curing compound provided the patch area will not be accessible to traffic before placement of a surface course. Discontinue use of black membrane-forming curing compound if it performs unsatisfactorily as a curing agent, and resume curing by other methods as specified. Cure test cylinders under the same conditions as the concrete pavement patch. Provide insulation or heating of patches

if the ambient temperature drops below 80F during the curing operation. Control the curing temperature and monitor at least hourly to ensure that the concrete pavement patch does not experience a curing temperature change in excess 40F within any 1-hour period during the curing operation. If a change in curing temperature in excess of 40F occurs in the concrete pavement patch within any 1-hour period, the work will be considered defective.

- **Section 516.3(m) Longitudinal Joints. Revise to read as follows:**

(**m) Longitudinal Joints.** In two lane width patching being performed at the same time, construct a Type L joint as shown on the Standard Drawings.

In two lane patching being performed one lane at a time, or one lane patching, provide a 1/4-inch, full depth, polystyrene board bond breaker in the longitudinal joint of Type A and B patches. Do not provide a bond breaker in the longitudinal joint of Type C patches. Provide tiebars in all Type C patches. For all patch types, saw cut the longitudinal joint 1/4 inch wide and 1 inch deep. Center the saw-cut over the joint.

- **Section 516.3(n) Sealing. Revise to read as follows:**

(n) Sealing. Seal all longitudinal and transverse joints constructed as part of this work, as specified in Section 501.3(n).

Seal all saw-cuts extending beyond the patch limits.

- **Section 516.3(q) Opening to Traffic. Revise to read as follows:**

(q) Opening to Traffic. For normal strength patches, do not open the repaired area to traffic until the concrete has obtained a minimum compressive strength of 3,000 pounds per square inch, when tested according to PTM No. 604.

For accelerated strength patches, obtain samples of plastic concrete, for compressive strength testing for opening to traffic, from each 100 cubic yards or fraction thereof of the day's placement, and, unless otherwise required, from the last mixer load of the day, according to the approved QC Plan. Sample locations will be selected according to PTM No. 1. Test concrete for compressive strength according to PTM No. 604, at the time of opening to traffic but no later than 7 hours after the test specimens were molded. Concrete lots that have not attained a minimum compressive strength of 1,200 pounds per square inch at the time of opening to traffic will be considered defective work.

SECTION 676—CEMENT CONCRETE SIDEWALKS

- **Section 676.3(h) Curb Ramps.Revise to read as follows.**

(h)Curb Ramps. As required and where indicated, construct cement concrete sidewalk for curb ramp configurations as indicated on Standard Drawing RC 67M except for the detectable warning surface located at the bottom of each ramp. Construct the detectable warning surface as specified in Section 695.

Create a slip-resistant textured surface for the full width and length of the curb ramp and any side-flares excluding the detectable warning surface. Use a coarse, stiff-toothed broom to create a textured pattern that is worked perpendicular to the slopes of the curb ramp.

Shape rounded edges instead of sharp angled edges while the concrete is still plastic for all slope changes of the curb ramp especially where the top of the curb ramp meets adjacent sidewalk surfaces.

Embed detectable warning surface in fresh, wet concrete at the proper location for the curb ramp before the wet concrete has set.

SECTION 1107—PRESTRESSED CONCRETE BRIDGE BEAMS

- **Section 1107.03(d)5.b. Air Content. Revise to read as follows:**

5.b Air Content. Provide an air content of 6% ± 1.5% for traditional mixes and 7% ± 2% for self consolidating (SCC) mixes. The air content requirement may be waived if the mix meets the following additional qualification tests before production:

- Rapid Chloride Permeability, AASHTO T277: 1500 coulombs at 56-days
- Freeze Thaw Resistance, ASTM C666, Procedure A or B: Minimum durability factor of 90 at 300 cycles.

G7038B - a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938,

Addendum:

Associated Item(s):

Header:
a07038 Changes to Specifications: Sections 101, 103, 110, 419, 695, 930, 931, 932, 934, 935, 938, 1012, 1015, and 1103

Provision Body:

SECTION 101—ABBREVIATIONS AND DEFINITIONS OF TERMS

- **Section 101.03 DEFINITIONS.Revise to include the following:**

MAJOR ITEM OF WORK—Any item having a unit of measure of other than Lump Sum, Call, Dollar, or Predetermined Amount (PDA).

SECTION 103—AWARD AND EXECUTION OF CONTRACT

- **Section 103.03 Cancellation of Award.Revise to read as follows:**

103.03CANCELLATION OF AWARD—The Secretary reserves the right to cancel the award of any contract at any time before its approval by the Chief Counsel, the General Counsel, and/or the Attorney General, or their designees, when such cancellation is in the best interests of the State. In the event of such cancellation, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration.No payment will be made for damages of any other kind including, but not limited to, lost profits.

- **Section 103.07 Cancellation of Contract.Revise to read as follows:**

103.07 CANCELLATION OF CONTRACT—The contract may be canceled by either party if the Notice to Proceed is not issued on or before the Anticipated Notice to Proceed Date specified in the bid package or within 30 days of the Award of the contract, whichever is later. Extension(s) of the cancellation period will be made only by mutual written consent of the parties to the contract provided such written consent is given before the expiration of the cancellation period. Prices will not be renegotiated. The Secretary also reserves the right to cancel the contract any time before the actual Notice to Proceed Date. If the contract is canceled, payment will be made for the documented costs of insurance and surety bonds required under Sections 103.04 and 103.05, and the documented cost of actual expenses reasonably incurred in accordance with a Letter of Intent, when specified and issued by the Deputy Secretary for Highway Administration. No payment will be made for damages of any other kind including, but not limited to, lost profits.

SECTION 110—PAYMENT

- **Section 110.02(d) Required Changes in the Scope of Work.Revise to read as follows:**

(d)Required Changes in the Scope of Work. The Department reserves the right to make, in writing, at any time, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations in the work will neither invalidate the contract or release the surety, and the Contractor agrees to perform the work as changed or altered.

If alterations in the work or changes in quantities do not significantly change the character of the work to be performed under the contract, the work will be paid for at the original contract unit price.

If alterations in the work or changes in quantities significantly change the character of the work under the contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character**,** an adjustment, excluding loss of anticipated profits, will be made as specified in Section 110.03. The basis for the adjustment will be agreed upon before the performance of the work. If a basis cannot be agreed upon, the work will be paid for as extra work as specified in Section 110.03.

The term “significant change in character” applies only to the following circumstances:

- If the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
- If any major item of work as defined in Section 101 is increased to in excess of 125% or decreased to below 75% of the original contract quantity. Any allowance for an increase in quantity applies only to that portion in excess of 125% of the original contract item quantity or, in case of a decrease below 75%**,** to the actual quantity of work performed.

When a contract item experiences a significant change in character as a result of a decrease to below 75% of the original contract quantity, the actual quantity of work performed may be paid at an adjusted price, as agreed upon with the Contractor and as approved; however, total compensation will not exceed the contract item’s original value. Item value is defined as the original contract quantity multiplied by the contract unit price.

SECTION 419—STONE MATRIX ASPHALT MIXTURE DESIGN, RPS CONSTRUCTION OF PLANT-MIXED HMA WEARING COURSES

- **Section 419.2(d) Stabilizer.Revise to read as follows:**

(d) Stabilizer. Provide mineral fiber, cellulose fiber, or crumb rubber (CR) stabilizers conforming to the requirements below and added at a rate specified in Table B.Use the dosage rate prescribed in the JMF.

1.Requirements for All Fiber Types. Fibers must prevent draindown in the mixture according to the tolerances in Table B.Use a fiber of the type and properties appropriate to the plant’s metering and delivery system.

2.Cellulose Fibers. Fibers must be of sufficient quality to prevent mixture draindown.

3.Cellulose Pellets. Use cellulose fiber stabilizing additive in pellet form that disperses sufficiently at mixing temperature to blend uniformly into the asphalt mixture.Use pellets that do not exceed 6 mm (0.25 inch) average diameter.Pellets may contain binder ingredients such as asphalt cement, wax, or polymer.Do not use pellets if the binder ingredient exceeds 20.0% of the total mass (weight) of the pellets.Use binder that produces no measurable effect on the properties of the asphalt cement.Do not use fiber pellets which soften or clump together when stored at temperatures up to 50 °C (122F).

Note: If the binder material constitutes more than 3% of the pellet mass (weight), base the dosage rate on the net fiber content.

4.Mineral Fibers. Use mineral fibers made from virgin basalt, diabase, slag, or other silicate rock.Use an approved mineral fiber meeting the following requirements for shot content, as tested according to ASTM C 612.

Sieve	**Percent Passing**
250 µm (No. 60)	85 - 95
63 µm (No. 230)	60 - 80

5. Crumb Rubber (CR). Use CR derived from the processing of recycled tires. Rubber tire buffings produced by the retreading process qualify as a source of CR. Furnish processed, free flowing CR from a manufacturer listed in Bulletin 15, certified as specified in Section 106.03(b)3.

5.a Gradation. Meet the following gradation as determined according to ASTM D 5461 using 200 mm diameter sized sieves and maintaining a maximum allowable loss after sieve analysis of 7.65%. As an alternative dry sieve analysis test method, perform the sieve analysis of the CR according to Florida Test Method, FM 5-559.

CR Gradation	
Sieve Size	**Percent Passing**
4.75 mm (No. 200)	100
2.36 mm	98 - 100
75 µm (No. 200)	0 - 3

5.b Contaminants. Provide CR relatively free from fabric, wire, cord, and other contaminating materials to a maximum total contaminant content of 2.5% (maximum of 1.0% iron, 1.0% fiber, and 0.5% other contaminants by mass (weight) of total CR sample components).

Remove rubber particles from the fiber balls before weighing. Determine the metal content by thoroughly passing a magnet through a 50 ± g (1.76 ± 0.004 ounces) sample. Determine fiber content by weighing fiber balls, which are formed during the gradation test procedure.

- **Section 419.2(d) Table B. Revise to read as follows:**

TABLE B

Mix Design Requirements for SMA Mixtures

AGGREGATE GRADATION REQUIREMENTS, PERCENT PASSING		
Sieve Size	**9.5-mm Mixture**	**12.5-mm Mixture**
19.0 mm (3/4 inch)	-	100
12.5 mm (1/2 inch)	100	90 – 99
9.5 mm (3/8 inch)	75 – 95	70 – 85
4.75 (No. 4)	30 – 50	28 – 40
2.36 mm (No. 8)	20 – 30	20 – 30
1.18 mm (No. 16)	-	-

600 mm (No. 30)	-	-
300 mm (No. 50)	-	-
150 mm (No. 100)	-	-
75 mm (No. 200)	8 – 13	8 – 11
VOLUMETRIC DESIGN REQUIREMENTS		
Design Gyrations (N_{design})	100	
Voids in Mineral Aggregate	18.0 % Minimum	
Voids in Course Aggregate (VCA)	$VCA_{mix} < VCA_{dry\ rodded}$	
Design air voids	3.5 - 4.0 %	
Minimum asphalt binder content	Table C	
Binder grade	PG 76-22	
Stabilizer content	Cellulose:0.2 to 0.4 % by total mix mass (weight) Mineral:0.3 to 0.4 % by total mix mass (weight) CR:0.3 to 1 % by total mix mass (weight)	
Draindown	0.3 % maximum	

- **Section 419.3(l) Joints.Revise to read as follows:**

  (l)Joints. Section 409.3(k).

SECTION 695—DETECTABLE WARNING SURFACE

- **Section 695.2(a) Detectable Warning Surface (DWS).Revise to read as follows:**

(a) Detectable Warning Surface (DWS). Provide a DWS product from a manufacturer listed in Bulletin 15 and meeting the requirements of the Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG). Provide certification as specified in Section 106.03(b)3 that the DWS meets the following PROWAG criteria:

- **General**.Detectable warning surface with the surface comprised of truncated domes.Dome size and spacing as specified and as indicated on Standard Drawing, RC-67M.
- **Surface**.Slip resistant.
- **Contrast**.Provide a DWS color, as approved by the Representative, that contrasts visually with adjacent walking surfaces either light-on-dark or dark-on-light.

SECTION 930—POST MOUNTED SIGNS, TYPE A

- **SECTION 930.2(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material.Revise to read as follows:**

(a) Extruded Aluminum Channel Signs, Posts, and Miscellaneous Material.

- Extruded Aluminum Channel Signs—Section 1103.02
- Steel S or W Beam Posts and Breakaway System—Section 1103.07
- Galvanized Steel Hex Head Bolts, Nuts, Lock - Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, 1/8-inch Rivets—Section 1103.11

- **SECTION 930.3(h) Erection.Revise to read as follows:**

(h) Erection. Install nuts on post clips with a torque wrench for extruded aluminum channels. Apply 225 inch-pounds of torque to each galvanized nut with the threads dry, clean, and unlubricated.

Attach the sign to posts with twist - in toggle and buckle straps or stainless steel post - clips for flat sheet aluminum. Apply 225 inch-pounds of torque to each stainless steel nut with the threads dry, clean, and unlubricated.

Clean signs after erection, removing any accumulation of oil, grease, dirt, or foreign material.

Brace the panel with one or more auxiliary supports if exit panels cannot be supported by two sign posts.

SECTION 931—POST MOUNTED SIGNS, TYPE B

- **SECTION 931.2 MATERIAL. Revise to read as follows:**

931.2MATERIAL—As shown on the Standard Drawings and as follows:

- Flat Sheet Signs—Section 1103.04
- Breakaway Steel Posts—From a manufacturer listed in Bulletin 15, and as specified in Section 1103.08.
- Anti - Theft Hardware—Section 1103.11, System A
- Packaged Dry Concrete—Section 624.2(b)

SECTION 932—POST MOUNTED SIGNS, TYPE C

- **SECTION 932.2(a) Signs, Posts, Supports, and Miscellaneous Material.Revise to read as follows:**

(a)Signs, Posts, Supports, and Miscellaneous Material.

- Flat Sheet Signs—Section 1103.04
- Treated Wood Posts—Section 1103.09
- Anti-Theft Hardware—Section 1103.11, System A
- Lag Screws—Section 1103.11(d)
- Shims and Bars—Section 1105.02(a)2
- Brackets—Section 1105.02(f)2

SECTION 934—POST MOUNTED SIGNS, TYPE E

- **SECTION 934.2(a) Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.Revise to read as follows:**

(a)Extruded Aluminum Channel Signs, Posts, Supports, and Miscellaneous Material.

- Extruded Aluminum Channel Signs—Section 1103.02
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips, Auxiliary Supports for Exit Panels, Rivets—Section 1103.11
- Angles (Supports)—Section 1103.12(g)

- Shim Bars and Plates (Supports)—Section 1105.02(a)2

- **SECTION 934.2(b) Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.Revise to read as follows:**

(b)Flat Sheet Aluminum Signs with Stiffeners, Posts, and Miscellaneous Material.

- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Treated Wood Posts—Section 1103.09(a)
- Composite Posts—Section 1103.09(b)
- Rivets—Section 1103.11(e)
- Stainless Steel Bolts, Nuts, Washers, Post-Clips; Twist-In Toggles and Buckle Straps; Butting Plates; Auxiliary Supports for Exit Panels—Section 1103.11
- Angles (Support)—Section 1103.12(g)
- Shim Bars and Plates (Supports)—Section 1105.02(a)2

SECTION 935—POST MOUNTED SIGNS, TYPE F

- **SECTION 935.2 MATERIAL.Revise to read as follows:**

935.2MATERIAL—As shown on the Standard Drawing for the corresponding type post and as follows:

- Flat Sheet Signs—Section 1103.04
- Brackets and Bars (Supports)—Section 1103.12
- Extruded Aluminum Channel Signs—Section 1103.02
- Flat Sheet Aluminum Signs with Stiffeners—Section 1103.03
- Galvanized Steel Hex Head Bolts, Nuts, Lock-Washers; Aluminum Post-Clips; Lag Screws; Rivets; Anti-Theft Sign Hardware (System A)—Section 1103.11

SECTION 938—DISTANCE MARKERS

- **SECTION 938.2 MATERIAL.Revise to read as follows:**

938.2MATERIAL—As shown on the Standard Drawings and as follows:

- Aluminum Blanks—Section 1103.04(a)
- Breakaway Steel Posts—Section 1103.08
- Anti - Theft Hardware—Section 1103.11(j)
- Brackets, Bars, Clamps, Straps and Gussett Plates (Supports)—Section 1103.12(i)

SECTION 1012—PEDESTRIAN RAILING

- **SECTION 1012.2(a) Railing.Revise to read as follows:**

(a)Railing.

- Aluminum-Alloy Casting—ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108, Alloy SG70A-T6.
- Aluminum-Alloy Bolts—ASTM B 211/B 211M, Alloy 2024-T4.
- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon, ANSI B18.2.3.5M (ANSI B18.2).
- Nuts. Finished hexagon, ANSI B18.2.4.6M (ANSI B18.2)—Threads, Class 6, 6g, or 6H (Threads, Class 2, 2A, or 2B).
- Aluminum Alloy Balusters – ASTM B 221/B 221M, Alloy 6061-T4.
- Post assembly and panel to post aluminum washers – ASTM B209, Alloy 2024-T3.
- Cast Aluminum Post Base – ASTM B 26/B 26M, Alloy SG70A-T6 or ASTM B 108/ B 108M, Alloy SG70A-T6.
- Other Aluminum Alloys—Section 1013.2(a)

Certify as specified in Section 106.03(b)3.

SECTION 1015—PROTECTIVE BARRIER

- **SECTION 1015.2(a) Barrier.Revise to read as follows:**

(a)Barrier.

- Aluminum-Alloy Extruded Section—ASTM B 221/B 221M, Alloy 6061-T6 or 6351-T5.
- Aluminum-Alloy Sheet and Plate—Alloy 6061-T6
- Aluminum-Alloy Bolts— ASTM B 211, Alloy 2024-T6 or 6061-T6
- Aluminum-Alloy Nuts—ASTM B 211/B 211M, Alloy 6061-T6.
- Nylon Washers—Section 1103.11(j)2
- Bolt Heads—Regular hexagon. ANSI B18.2.3.5M (B18.2)
- Nuts—Finished hexagon, ANSI B18.2.4.6M (B18.2) Thread, Class 6, 6g, or 6H (2, 2A, or 2B)
- Other Aluminum Alloys—Section 1013.02(a)

Certify as specified in Section 106.03(b)3.

SECTION 1103—TRAFFIC SIGNING AND MARKING

- **SECTION 1103.11 MISCELLANEOUS MATERIALS.Revise to read as follows:**

1103.11MISCELLANEOUS MATERIALS—

(a) **Hex Head Bolts, Nuts, and Washers for Extruded Panel Sign Post-Clips.**Galvanized steel as specified in Section 1105.02 (s):

1. Hex Head Bolts.ASTM A307, Grade A or B.

2.Nut.ASTM A563 DH or ASTM A194 Grade 1 or 2.

3.Washer. Carbon steel helical coil or ASTM F436 or ASTM F844 (Note 1)

Note 1: If either ASTM F436 or ASTM F844 flat washers are used, bolt must be fastened either using two nuts or a single nut with the threads galled adjacent to the nut to prevent loosening.

(b)Post - Clips. For extruded panel signs, aluminum, conforming to ASTM B 108, Alloy 356-T6. For flat sheet aluminum signs with stiffeners, stainless steel, Type 304, 14 gage.

(c)Auxiliary Supports for Exit Panels. Aluminum conforming to ASTM B 211/B 211M, Alloy 6061-T6. 3 inches by 3 inches by 3/16-inch angle, 6 1/2 feet long or long enough to attach to three stiffeners on the main sign.

(d)Lag Screws. 5/16-inch round head, galvanized steel as specified in Section 1105.02(s); ASTM A 307.

(e) Rivets. Aluminum, self - plugging or hollow - core, as follows:

- 3/16-inch for mounting reflective units and distance plaques—Alloy 5056 with 7178 mandrels.
- 3/16-inch for mounting flat aluminum sheets to stiffeners sections— Alloy 5056 with carbon steel mandrels.

Rivet size specified is the minimum shank diameter. Use rivets with sufficient grip range to attach to background sign material, stiffeners, or posts. Use a No. 10 drill for 3/16-inch rivets for attachment of stiffeners and splice bars.

(f)Bolts, Nuts, and Washers for Flat Sheet Aluminum Signs with Stiffeners. Stainless steel, Type 304 bolts. Use 5/16-inch by 1 inch long for butting plates and 5/16-inch by 2 inches long for post - clips. Use standard connection bolts or twist - in bolts.

(g)Twist - in Toggle and Buckle Straps. Stainless steel, Type 201, and 0.75 inch wide and 0.03 inch thick, with rounded edges. Spot welded, twist - in type toggle on end of strap. Spot welded, antirotational buckle on other end of strap. Toggles and buckles shall be stainless steel, Type 304, and 1/16 inch thick.

(h)Butting Plates. Fabricate from stainless steel, Type 304.

(i)Anchors. Section 1105.02(c)2.From a manufacturer listed in Bulletin 15.

(j) Anti - Theft Sign Hardware.

1.System A.

- **Bolts.** Section 1105.02(c)1 and as follows:

  Provide 5/16 inch by 2 1/2-inch steel carriage bolts with minimum 1711/16-inch diameter round head, square neck, and threads to within 1 inch of head.

  Furnish bolts having a mechanically deposited cadmium coating, ASTM B 696, or zinc, Type I coating as specified in Section 1105.02(s).

- **Nuts.** Square, pyramidal-shaped nuts with all four sides sloping at an angle of 41 degrees; 5/16-18 UNC threads; C-1010 cold-rolled steel, case hardened to Rockwell hardness of 55 to 60.

  Furnish nuts having a 0.002 inch to 0.005 inch thick, mechanically deposited, zinc, Type II yellow chromate coating as specified in Section 1105.02 (s) (ASTM B 695), tested according to ASTM B 201.

2.System B.

- **Bolts.** Section 1103.11(m) and as follows:

  Provide 5/16-inch by 2 1/2-inch and 5/16-inch by 3-inch bolts with minimum 9/16-inch diameter one-way heads and threads to within 1 inch of head.

- **Nuts.** Section 1103.11(n) and as follows:

  Provide nuts, Alloy 2011-T3, double-chamfered hexagon with self-locking conical shape 9/16-inch - 3/8-inch by 3/16-inch unit under the nut with 5/16-18 UNC threads. Hexagon portion should break away from self-locking unit with 5/16-18 UNC to 40 inch-pounds to 80 inch-pounds of torque.

- **Washers.** Nylon 1/8 inch thick by 1-inch minimum outside diameter with 480 inch-pounds maximum allowable applied torque.

(k) Banding. Stainless steel, Type 201, 0.750 inch wide by 0.030 inch thick, with rounded edges for handling ease and safety. Buckles and other necessary hardware shall be of stainless steel, Type 304.

(m)Aluminum Bolts.ASTM B 211/B 211M. Alloy 2024-T4, thread fit, ANSI Class 6g, and threads shall be within two threads of the head or a minimum of 1 3/4 inches.

(n)Aluminum Nuts.ASTM B 211/B 211M. Alloy 2024-T6, thread fit, ANSI Class 6H (ANSI Class 2B, 18 UNC threads).

N10501A - a10501 BRIDGE SHOP DRAWINGS

Addendum:

Associated Item(s):

Header:
BRIDGE SHOP DRAWINGS

Provision Body:

The District Engineer has designated AECOM to act as agent for the review and acceptance of bridge shop drawings. Submit print sets for review and acceptance, as specified in Section 105.02(d), to the following address:

AECOM

Attn: Tim Gunner, P.E.

1700 Market Street

Suite 1600

Philadelphia, PA 19103

N10560A - a10560 ENVIRONMENTAL COMMITMENT AND MITIGATION TRACKING SYSTEM (ECMTS) REPORT REVIEW AND SIGN-OFF

Addendum:

Associated Item(s):

Header:

ENVIRONMENTAL COMMITMENT AND MITIGATION TRACKING SYSTEM (ECMTS) REPORT REVIEW AND SIGN-OFF

Provision Body:

This work is the Contractor review and documented evidence of implementation of the environmental commitments identified in the project Environmental Commitments and Mitigation Tracking System (ECMTS) report.

Designate a responsible individual (Project Manager or Site Superintendent) to maintain the ECMTS Report during construction. Identify the designated individual's name in a note at the bottom of the matrix. Include additional names if responsible individuals change during the construction of the project.

The designated individual will review each Mitigation Category and associated mitigation identified in the ECMTS Report with the Department Construction Project Manager, Inspector-In-Charge, and District Environmental Manager (or Environmental Monitor if one is assigned to the project). As each mitigation requirement is completed, have the designated individual initial and date the appropriate block. By initialing and dating the block, the designated individual confirms that the Contractor has reviewed the mitigation commitment, understands the commitment, and has incorporated the mitigation commitment in the construction of the project, as appropriate.

Ensure that the mitigation commitments are completed in a timely manner. Review the ECMTS Report with the Department Construction Project Manager, Inspector- In- Charge, and District Environmental Manager (or Environmental Monitor if one is assigned to the project) at each status meeting. The Department Construction Project Manager (or Environmental Monitor) will verify, date, and initial each mitigation commitment as it is completed.

Direct questions regarding the mitigation commitments to the District Environmental Manager (or Environmental Monitor). The District Environmental Manager is to be notified of any problems with implementing the commitments. Changes to mitigation commitments are to be reviewed and approved by the District Environmental Manager. The District Construction Services Engineer should be notified of any problems encountered during the implementation of the commitments and mitigation measures.

Maintain one copy of the ECMTS Report at the Contractor's project field office and provide one copy to the Inspector-In-Charge after each update.

Submit one copy of the completed ECMTS Report to the Department Construction Project Manager, one copy to the District Construction Services Engineer, and one copy to the District Environmental Manager upon completion of the project.

This work includes the review and sign- off of the ECMTS Report only, and is considered incidental to the project. Any work associated with the mitigation commitments are paid for under separate contract pay items or are considered incidental to construction.

00 - AMTRAK INSURANCE REQUIREMENT

Addendum:

Associated Item(s):

Header:

Provision Body:

Refer to attachment "AMTRAK Insurance Requirements for Temporary Permit to Enter" for Amtrak insurance requirements.

S6092A - b06092-SECTION 609.2(g) MISCELLANEOUS MATERIALS

Addendum:

Associated Item(s):

Header:

SECTION 609.2(g) MISCELLANEOUS MATERIALS

Provision Body:

Section 609.2(g) Miscellaneous Materials. Add the following new set of bullets:

The laser printer(s) and/or color printer(s) needed for this project will be obtained for Department use through a statewide lease agreement and not as part of the Equipment Package contract item.

A total of (*See "a" in Project Specific Details)* Laser Printer(s) and (*See "b" in Project Specific Details)* Color Printer(s) will be leased for the project.

Provide compatible toner cartridges for each laser printer and compatible ink jet cartridges for each color printer indicated above, as required. The exact make and model of laser printer and/or color printer being used on the project will not be known until the start of work. For cost estimating purposes, toner cartridges and/or ink jet cartridges furnished must be usable with the type of printer specified in Section 609.2(d)3. and Section 609.2(d)4., as applicable.

Project Specific Details:

(a) 2 (Two)
(b) 2 (Two)

S10301A - b10301 SECTION 1030 - BENCH MARKS (SU)

Addendum:

Associated Item(s):

Header:

SECTION 1030 - BENCH MARKS

Provision Body:

1030.1 DESCRIPTION - This work is the placing of bench marks on structures.

1030.2 MATERIAL - Bench marks will be furnished and delivered to the project by the Department.

1030.3 CONSTRUCTION - Unless otherwise indicated, place the bench marks on top of the right parapet walls over the near abutments of the indicated structures in a position so the bridge railings do not obstruct use of the bench marks.

No bench marks, other than those furnished by the Department will be permitted on any structures.

1030.4 MEASUREMENT AND PAYMENT - Bench Marks will be considered incidental to the other items of bridge construction and will not be paid for separately.

I2032C - c02032 ITEM 9203-0101 - TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

Addendum:

Associated Item(s): 9203-0101

Header:

ITEM 9203-0101 - TEMPORARY EXCAVATION SUPPORT AND PROTECTION SYSTEM

Provision Body:

I. DESCRIPTION - This work is the design and construction of a temporary excavation support and protection system or appropriately designed open cut excavation, as indicated, with a service life of less than or equal to 36 months.

II. MATERIAL - Provide certification or laboratory test results verifying material properties. For used steel, the salvage design values from AASHTO Guide Design Specification for Bridge Temporary Works (AASHTO Guide Spec) may be used as an alternate to testing to determine grade of steel. Materials need not be new but must be in serviceable condition as determined by the Engineer. Temporary material used does not have to be from a Bulletin 15 source, but must meet the following:

- Structural Steel.....….....AASHTO M 270M/270 (ASTM A709M/A709) Grade 250(Grade 36), Grade 345(Grade 50) or Grade 345W(Grade 50W)
- Steel Sheet Piling.....….. .....ASTM A328M/A328, ASTM A572M/A572
- Steel H-Piles.....….. .....AASHTO M 270M/270 (ASTM A709M/A709), Grade 250(Grade 36)
- Wood Lagging.....…..... ...Rough Cut Species in AASHTO Guide Spec Appendix A and AASHTO Construction Handbook for Bridge Temporary Works Appendix C
- Cement.....…….....AASHTO M85 and AASHTO M240
- Pre-Stressing Steel.....….. .ASTM A416 Grade 270
- Welded Wire Fabric..... ..AASHTO A55 (ASTM A185)
- Reinforcement Bars..... ....AASHTO M 31M/31 (ASTM A615M/A615), AASHTO M42M/M42 (ASTMA616M/A616),Grade420(Grade 60)
- Other Material.....….....In accordance with applicable Sections of Publication 408

III. DESIGN - Design the temporary excavation support and protection system in accordance with current AASHTO LRFD Bridge Design Specifications and Design Manual, Part 4 (Metric) Specifications, current FHWA guidelines and AASHTO Guide Spec. Design temporary excavation support and protection system for final condition and all construction conditions, including surcharge loads due to vehicle traffic and construction equipment. Submit 4 sets of design calculations and 4 sets of completed detailed drawings, signed and sealed by a Professional Engineer, registered in the Commonwealth of Pennsylvania to the District Executive for review. Include in the design calculations all material properties, design loads, and design assumptions. Include on the completed detailed drawings all design dimensions, limits of work, elevations, material, member sizes and construction sequence. Provide cutoff elevation of steel and wooden components for work in streambed. Include specific installation procedures and testing requirements as part of the submittal. Allow 14 days for the review by the Department.

Ensure that temporary excavation support and protection system design and construction conforms to the following:

a) Open cut excavations are allowed, provided they meet OSHA requirements, the safety of the traveling public, the approved traffic control plan and existing structure is assured, and they stay within the legal right-of-way lines. Cuts can extend beyond legal right- of- way lines only with the written approval of the Department and written permission of the property owners. Ensure environmental compliance if cut extends beyond area cleared by the Department. Submit slope stability analysis in accordance with Publication 293.

b) The temporary excavation support and protection system will be selected by the Contractor. Examples include anchored walls, mechanically stabilized earth walls, prefabricated modular walls, cantilever walls, cofferdams, and soil nailing walls. These systems may be comprised of one or more of the following: Soldier Piles, Timber Lagging, Steel Sheet Piling, Caissons, Slurry Walls, Tiebacks, Soil Nails, Shotcrete, Deadman Anchors, Wales, Cross lot Bracing, Raker Braces, Precast Concrete, Precast Lagging, Soil Cement Lagging, Cement Bentonite, Gabions, Minipiles, Concrete Reaction Blocks, Mechanically Stabilized Earth Walls or other methods.

c) Design temporary excavation support and protection system based on the following parameters:

1. Soil parameters (***see Project Specific Details for following parameters***):

1.a Effective angle of friction _____

1.b Moist unit weight of soil _____

1.c Saturated unit weight of soil _____

1.d Effective cohesion _____

1.e Static groundwater level at elevation _____

1.f Undrained shear strength of cohesive soil_____

1.g Shear strength for rock mass_____

Provide other soil/rock properties with test data, needed in the design of the temporary excavation support and protection system.

2. Ensure that all components stay within the legal right-of-way unless an easement is obtained by the Contractor.

IV. CONSTRUCTION - Install temporary excavation support and protection system in accordance with applicable sections of Publication 408. Be responsible for adequacy, safety and compliance with Traffic Control Plan. If the design is not compliant with the approved Traffic Control Plan, furnish any additional traffic control devices at no additional cost to the Department. All steel and wooden components may remain in place to pavement subgrade or 0.6 meters(2 feet) below finish grade,whichever is higher elevation. Treated wood is not required unless it is within 2 meters(6 feet) of finish grade and is to remain in place. Pressure treat with chromate copper arsenate (CCA) to refusal. Finish grade is defined as top of pavement when a roadway is behind the temporary excavation support and protection system. Have a Professional Engineer, registered in the Commonwealth of Pennsylvania, certify that the temporary excavation support system or open cut excavation has been installed as shown on the Professional Engineer's signed and sealed drawings. Submit the certification to the Representative within 3 working days of completion of the system.

V. QUALIFICATIONS - The work must be supervised by a superintendent or foreman who is experienced, in the construction of temporary excavation support and protection system proposed. If the design height of the temporary excavation support and protection system exceeds 6 meters(20 feet), provide the following with the design submission:

- For the superintendent or foreman who will supervise the work, submit a list containing at least 5 projects which demonstrate a minimum of 3 years experience in the construction of the temporary excavation support and protection system proposed. Include a brief description of each project and the name and phone number of the owner's representative knowledgeable in each project listed.
- The name of the Professional Engineer, registered in the Commonwealth of Pennsylvania and having at least 3 years experience in the design and construction of temporary excavation support and protection systems, who will design and specify the sequence of construction of the temporary excavation support and protection of system.

VI. MEASUREMENT AND PAYMENT - Lump Sum.

This item will be measured and paid for in a proportionate manner, designated by the Department.

If an acceptable open cut excavation is provided in lieu of the temporary excavation support indicated, payment will be made for the as-bid lump sum temporary excavation support item, but no additional payment will be made for any class of excavation, structure backfill or additional shoring as a result of the open cut excavation or to restore the facilities to their original condition.

Project Specific Details:

The Soil Parameters as indicated in III. (c) 1. are:
1.a Effective angle of friction: 32 degrees
1.b Moist unit weight of soil: 120 pcf
1.c Saturated unit weight of soil: 125 pcf
1.d Effective cohesion: 0 psf
1.e Static groundwater level at elevation: N/A
1.f Undrained shear strength of cohesive soil: N/A
1.g shear strength of rock mass: N/A

I6091F - c06091 ITEM 0609-0009 EQUIPMENT PACKAGE

Addendum:

Associated Item(s): 0609-0009

Header:

ITEM 0609-0009 EQUIPMENT PACKAGE

Provision Body:

Appendix

Table A

EQUIPMENT PACKAGE	
Equipment	**Quantity**
Communications Equipment	
Copier (1)	1
Fax Machine (1)	1
Cellular Phone(s)	10
Electronic Equipment	
Digital Camera	1
Document Scanner (2)	
Laser Printer (2)	
Color Printer (2)	

Specialized Equipment	
Surveyor's Level & Measuring Rod	1
Electronic Digitizer	
Digital Display Level	2
Infrared Thermometer	2
Laser Range Finder	
Paper Shredder	
Miscellaneous Items	
Internet Service Provider	
Computer Media	Yes
Toners/Cartridges	Yes

(1) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate copier and fax.

(2) Unless otherwise approved, a multifunction machine may not be furnished in lieu of a separate scanner, laser printer and color printer.

Microcomputer Systems. A total of 3(Three) microcomputer systems will be used on the project.

This information is being provided to assist Bidders in meeting the requirements of Section 609.2(f), Internet Service, and Section 609.2(g), Miscellaneous Materials.

Microcomputer systems may be furnished by the Department. If microcomputer systems are to be furnished by the Contractor, as part of the construction Contract, the bid will include applicable, 0688-XXXX bid items. When indicated, furnish microcomputer systems meeting the requirements of Section 688.

I19991A - c19991 ITEM 1999-0000 - TRAINEES FOR PROJECTS 100% STATE FUNDED

Addendum:

Associated Item(s): 1999-0000

Header:

ITEM 1999-0000 - TRAINEES FOR PROJECTS 100% STATE FUNDED

Provision Body:

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," and is in implementation of 23 U.S.C. 140 (a). Also an implementation of E.O. 1996-8, M215.2.

I. DESCRIPTION - As part of the contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The contractor shall provide on the job training aimed at developing candidates toward full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under the special provision will be (***number of trainees is found in the Project Specific Details, Detail 1***).

II. CONSTRUCTION

(a) In the event a subcontract is given for a portion of the contract work, determine how many, if any, of the trainees are to be trained by the subcontractor. However, retain the primary responsibility for meeting the training requirements imposed by this Special Provision. Insure that this Special Provision is physically included and is made applicable to any such subcontract. Where feasible, provide 25% of apprentices or trainees in each occupation, in their first year of apprenticeship or training.

(b) Distribute the number of trainees among the work classifications on the basis of the project needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Within ten (10) calendar days following the Notice to Proceed submit to the Department for approval the number of trainees to be trained in each selected classification and the training program to be used, specifying the starting time for training in each of the classifications. The Department will give credit for each trainee employed on the contract who is currently enrolled or becomes enrolled in an approved program and payment will be made for such trainees as provided herein.

(c) Training and upgrading of minorities and women toward journeymen status is a primary objective of this Special Provision. Accordingly, make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. Accept responsibility for demonstrating that steps are taken in pursuance thereof, prior to a determination as to whether compliance is made with this Special Provision. This training commitment is not intended, and do not use it, to discriminate against any applicant for training, whether a member of a minority group or not.

(d) Do not employ a person as a trainee in any classification in which he/ she has successfully completed a training program leading toward journeymen status or in which he/ she has been employed as a journeymen. Candidates may be trained a maximum of three (3) times as long as the training is not repetitious in the scope of work and is not on the same project. Those candidates having attained journeymen status would be acceptable as trainee candidates only in classifications where they have not attained journeymen status. Satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, provide records documenting the findings in each case.

(e) The minimum length and type of training for each classification will be established in the training program selected and submitted to and approved by the Department. The Department will approve a program if it is reasonably calculated to meet the project equal employment opportunity obligations and gives meaningful training to move candidates toward journeymen status. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training will also be considered acceptable provided they are being administered in a manner consistent with the equal employment obligations or State-funded highway construction contracts. Obtain approval or acceptance of a training program and training candidate from the Department prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk- typists or secretarial- type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the Department. Some off site training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

(f) Furnish the trainee a copy of the program he/she will follow in providing the training.

(g) Provide each trainee with a certification showing the type and length of training satisfactorily completed.

(h) Provide for the maintenance of records and furnish required reports documenting his/ her performance under this Special Provision.

(i) No less than the common laborer rate for this project will be paid to any trainee performing in a construction craft. Non-construction crafts such as timekeeper, office manager and surveyor will be paid the fair market rate for those services or classifications. Trainees in construction crafts can remain at the common laborer rate throughout the training program (percentage payments will no longer be in effect). Upon completion, trainees shall be paid in accordance with wage rate scale for this contract for work performed. In the case of apprentices, the appropriate rates approved by the Federal Department of Labor or Transportation in connection with the existing program apply to all trainees being trained for the same classification who are covered by this Special Provision.

III. MEASUREMENT AND PAYMENT – HOUR Will be paid as follows:

(a) Except as otherwise noted below, payment will be made per hour of training given an employee on this contract in accordance with an approved training program. As approved by the District ADE- Construction, payment will be made for training persons in excess of the number of specified herein. Payment for off site training indicated above may only be made where one or more of

the following is done and the trainees are concurrently employed on a State-funded project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the off site training period.

(b) No payment will be made if the contractor fails to provide the training required as stated in the approved training program. Every good faith effort should be made to retain the trainee upon completion of the training program, if work continues to be available in that classification. It is normally expected that a trainee will begin his/her training on the project as soon as feasible after the start of work utilizing the skill involved and remain on the project as long as training opportunities exist in the work classification or until he/she has completed the training program. It is not required that all trainees be on board for the entire length of the contract. Responsibilities will have been fulfilled under this Special Provision if acceptable training has been provided to the number of trainees specified. Determine the number trained on the basis of the total number enrolled on the contract for a significant period.

Project Specific Details:

1. The number of trainees referred to in para I. is: 2 (2000 Hours)

I30041D - c80041 ITEM 8110-0001- ALTERNATE BRIDGE STRUCTURE

Addendum:

Associated Item(s): 8100-0002, 8110-0001, 8110-0002

Header:

ITEM 8100-0002 - STEEL BRDIGE STRUCTURE
ITEM 8110-0001 - BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905
ITEM 8110-0002 - BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905

Provision Body:

PART A

I. DESCRIPTION - This work is either construction of the bridge structure as designed or designing and constructing an equivalent bridge structure of an alternate design in place of the "as-designed" bridge structure.

II. DESIGN -

(a) General. If an alternate design bridge structure is bid, furnish, to the Department, preliminary conceptual design calculations and drawings for the alternate bridge structure, on reproducible tracing cloth or drafting film. Provide an alternate design equivalent to the original design and meeting applicable design criteria for strength and serviceability. Submit the alternate design to the District Bridge Engineer for acceptance. Refer to PENNDOT Design Manual Part 4, PP 1.10, Bridge Submissions-Construction Phase, for details on procedures for contractor submissions. If the equivalency of an alternate design cannot be clearly established, the Chief Bridge Engineer will arbitrate and the Chief Bridge Engineer's decision will be final. Furnish, with the preliminary conceptual design submission, a tabulation identifying the differences between the "as-designed" bridge structure and the alternate design bridge structure.

Any delay in submission and acceptance of a proposed alternate design or a revision, and/or approval of required permits, will not extend the contract time.

If an alternate design bridge structure is bid, and an acceptable preliminary conceptual design is not approved within 30 calendar days from the award date (6 days for the submission and 24 days for Department review), construct the "as-designed" bridge structure at no additional cost to the Department.

Alternate designs which take advantage of any errors and/or omissions in the plans for the "as-designed" bridge structure, or discrepancies between the "as-designed" bridge structure plans and the special provisions covering alternate designs, will not be accepted. In the event any such error, omission, or discrepancy is discovered, immediately notify the Department. Failure to notify the Department will constitute a waiver of all claims for misunderstandings, ambiguities, or other situations resulting from the error, omission, or discrepancy.

Experimental or demonstration-type design concepts; or products, structures, or elements not preapproved by the Department for general usage, will not be allowed in the alternate design.

Only eligible types of bridge structures, as shown in the Project Items and Quantities, bid documents, or special provisions, are allowed as contractor-designed alternates.

Value Engineering will not be allowed for elements changed by an approved alternate design.

Use the same type foundation for an alternate design as that indicated for the "as-designed" bridge structure. Contractor-designed alternate foundation types will not be allowed, but Value Engineering of the as-designed foundation will be allowed.

Do not use Integral or Semi-Integral Abutment design as an alternate or as Value Engineering.

Have the alternate design completed by a Professional Engineer (P.E.) registered in the Commonwealth of Pennsylvania.

Submit an affidavit, before or along with the preliminary conceptual design submission, stating that the designer is familiar with AASHTO, PENNDOT, and other applicable design criteria, standards, and construction specifications. Also, submit a list of bridges designed for the Department within the past 5 years.

In identifying alternate design bridge structures, retain the "as-designed" bridge structure number, but suffix the numbers with the letters A, B, etc.

Show, on all sheets of the alternate design, the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, the date signed, a business name, a business address, and the note "These drawings (S-XXXXXA) supersede drawings (S-XXXXX) approved (insert appropriate date)".

The Department will furnish tracings and design computations for the "as-designed" bridge structure to the successful bidder upon request.

Complete original plans for an alternate design entirely in either ink or pencil. Make changes in the same medium. Prepare alternate design plans using Department drafting standards.

Ink reproductions on tracing cloth may be furnished, if made by the "contact negative process".

(b) Design Computations and Design Specifications. On the first sheet of the computations for the alternate design show the seal of a P.E. registered in the Commonwealth of Pennsylvania, a valid signature in ink, and the date signed.

Provide a complete set of computations for the alternate design of the superstructure and/or substructure, including foundation. Reproduce and insert computations from the "as- designed" bridge structure, as needed. Provide additional calculations, as needed by the District Bridge Engineer to evaluate any details, throughout the life of the contract.

Designs copied directly from approved Department Standards need not be documented through independent computations. List such designs on the submission by referencing the drawing number of the applicable standard, and the sheet number, table, or graph.

Use PENNDOT Design Manual Part 4 for design policy procedures and criteria. All design related Strike-off Letters listed in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS", are applicable to the alternate design.

In the event that certain design parameters, stresses, or specifications are in conflict, the following order of predominance governs:

- Design requirements listed herein and in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS."
- Design related Strike-off Letters in effect on the date of project advertisement. Refer to the list in PART B.
- PENNDOT Design Manual Part 4, "Structures"
- PENNDOT Bridge Design and Bridge Construction Standards
- AASHTO Standard Specifications for Highway Bridges, and interim specifications, as indicated for the "as-designed" bridge structure.

In the event that a clear order of predominance cannot be established, or a difference in the interpretation of the design criteria, standards, specifications, or methodology cannot be resolved, the Chief Bridge Engineer will arbitrate and the Chief Bridge Engineer's decision will be final.

Do not use BLC standards unless HS-20 design load is specifically allowed by the "as-designed" plans or in PART B.

Submit shop drawings on standard ANSI D size 863.6 mm × 558.8 mm (34 inch by 22 inch) to the District Bridge Engineer for review and acceptance. The Department is not responsible for work done without approved shop drawings.

If any provisions in PART B conflict with those in PART A, the provisions in PART B are to govern.

Within 60 calendar days after completion of the bridge structure, revise the structure drawings to show "as-built" conditions and submit them to the Representative. If caissons or piles are utilized, show, on the bridge elevation view, the maximum and minimum tip elevation and the average length for each substructure unit.

(c) Design Requirements. In the design of an alternate bridge structure, comply with PENNDOT Design Manual Part 4, "Structures", and other design criteria as specified for the "as-designed" bridge structure, subject to the exceptions and/or additions in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Provide clear span distances between faces of substructure units and underclearances of not less than the minimum values indicated for the "as-designed" bridge structure, except as noted in PART B.

The minimum underclearance for stream or river crossings is defined as the high water elevation for the design flood plus the specified debris clearance or as indicated for the "as-designed" bridge structure, whichever is less.

The minimum clearance for overpass structures is defined as the minimum required underclearance plus 75 mm (3 inches) or the minimum underclearance indicated for the "as-designed" bridge structure, whichever is less. Provide additional underclearance to compensate for foundation settlement if applicable to the alternate design.

Provide equivalent inspection and maintenance accessibility for the alternate bridge structure as for the "as-designed" bridge structure. In case of a disagreement on accessibility, the Chief Bridge Engineer's decision will be binding.

Do not change the indicated horizontal and vertical alignments, except as noted in PART B.

For an alternate bridge structure, design the substructure to be within the limits of allowable foundation pressures and allowable pile loads, as indicated for the "as-designed" bridge structure.

Provide structure and end structure drainage as indicated for the "as-designed" bridge structure.

1. Deck Joints. Provide the same type and number of expansion joints for an alternate bridge structure as specified for the "as-designed" bridge structure.

2. Bearings. Provide the same type bearings for an alternate bridge structure as specified for the "as-designed" bridge structure.

Provide an expansion dam support system as indicated for the "as-designed" bridge structure unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

3. Superstructure. If the as-designed bridge superstructure consists of curved girders, as shown on the structure drawings, the alternate design bridge superstructure is also to consist of curved girders.

Provide slab designs conforming to the requirements of Standard Drawing BD-601M. Use composite design only, unless the "as-designed" bridge structure utilized noncomposite design.

4. Super Load Bridge Beams. Do not use super load bridge beams (beams over 48 800 mm (160 feet) in length or total load over 894 kN (201,000 pounds) gross weight) unless included in the "as-designed" bridge structure or permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS". Verify that an oversize and/or overweight permit can be issued for superloads, before incorporating them into the alternate design.

If super load bridge beams are used, for transportation of these beams conform to the requirements of PENNDOT Design Manual Part 4, Appendix E, and the following:

o Requests for waiver of any provisions of Chapter 179 of Title 67 will not be approved, except as noted herein.

o Transportation equipment axles will not be permitted in excess of 120 kN (27,000 pounds), regardless of gross weight.

5. Alternate Prestressed Concrete Bridge Structure. Use the Department's prestressed concrete girder computer program to design precast prestressed concrete beams.

Prestressed Concrete Beams. Prestressed concrete beam sections, differing significantly from the standards specified herein, will be considered special sections and subject to the requirements of Section 1107.03(a)4. Do not deviate from the minimum flange and web thicknesses or section properties shown in the Bridge Design Standards.

The redesign of precast diaphragms as specified in PENNDOT DWG. #95-604-BQAD dated 11/20/96 from as designed cast-in-place diaphragms will be considered an alternate bridge structure also.

Use of low mass (lightweight) concrete for prestressed beams is not allowed.

o Deck Slab. If the effective slab span is less than 1100 mm (3 1/2 feet), a minimum slab thickness of 190 mm (7 1/2 inches), using all No. 13 (No. 4) reinforcement bars, is allowed.

o Prestressed Concrete Segmental Box Girders. Use either single or multiple cell box girders, trapezoidal in shape (inclined webs) or rectangular in shape (vertical webs). Provide for future deck removal and replacement in the design and details. Conform to design criteria specified for the "as-designed" bridge structure; and as follows:

Cast-in-place joints may be used to join precast segments, in place of match cast joints sealed with epoxy. If cast-in-place joints are used, shear keys may be omitted. However, if shear keys are omitted, striate and/or heavy score the surfaces to be joined to a minimum depth of 6 mm (1/4 inch). Use the same concrete mix for cast-in-place joints as for the precast segments, and ensure that strength development is the same.

Maintain a joint width as needed for coupling conduits, welding or lapping reinforcement, and placement of concrete, but in no case allow a joint width of less than 100 mm (4 inches) at the closest point. Keep adjacent concrete surfaces thoroughly wet or apply an approved bonding agent before placing concrete in the joint.

Identify anchor piers. Provide box girder diaphragms having sufficient openings to allow for continuous inspection of the inside of the box girder. Provide steel access doors with master locks, at each abutment, for each box. Provide diaphragms that are substantially solid at piers and abutments, except for access and utility holes.

Design adjacent prestressed box beam as a composite beam unless otherwise specified in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

6. Alternate Steel Bridge Structure. Do not use unpainted weathering steel unless permitted in PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

Do not include longitudinal stiffeners in computing steel section properties.

7. Nonstandard Designs. Do not submit an alternate design bridge structure, either prestressed concrete or steel, which is not covered by the aforementioned Standards, or under PART B, "SPECIAL DRAWINGS AND SPECIAL DESIGN REQUIREMENTS".

8. Pile-Supported Foundation. Base pile design for the alternate bridge structure on the same type, size, length, tip reinforcement, maximum design load, and driving criteria specified for piles for the "as-designed" bridge structure. Piles will be measured and paid for as specified herein.

Include test piles in the lump sum price bid for the bridge structure. Provide the same number of test piles per substructure unit for alternate designs as specified per substructure unit for the "as-designed" bridge structure.

Load test piles, when specified for the "as-designed" bridge structure, will be measured and paid for separately, as specified. Provide the same number of load test piles per bridge structure for an alternate design as specified for the "as-designed" bridge structure, located at a substructure unit as close as possible to the "as-designed" location.

Bearing piles, additional test piles, test pile extensions, load test pile extensions, and pile tip reinforcement will be measured and paid for separately as specified in Section 1005.4. Determine test pile extensions and load test pile extensions relative to the pile lengths indicated in the estimated quantities for the "as-designed" bridge structure or approved alternate bridge structure.

Record the bid quantities for bearing piles and pile tip reinforcement in the spaces provided in the Project Items and Quantities for the alternate design.

Base the estimated quantity for bearing piles used in an alternate design on maximum utilization of the allowable design load indicated for piles used in the "as-designed" bridge structure.

Calculate the lengths of bearing piles used in an alternate design as follows:

o Determine the bearing pile length for each as-designed substructure unit, to the next longer 100 mm (foot), by dividing the quantity of bearing piles by the number of bearing piles for that unit, using the estimated quantities indicated for the "as-designed" bridge structure.

o For alternate designs involving the relocation of substructure units, determine bearing pile lengths by straight line interpolation, to the next 100 mm (foot), using as-designed pile lengths and the average distance between as-designed substructure units in back and ahead of the relocated unit. Base the average distance between as-designed substructure units on measurements between the centerlines of piers (or centerline of bearing at abutments) along the centerlines of exterior girders or beams. If the alternate design bridge structure is longer than the "as-designed" bridge structure, provide bearing piles for the relocated abutment of the same length as the bearing piles for the as-designed abutment.

o If one of the as-designed substructure units in back or ahead of a relocated unit is wholly supported on a spread foundation, determine the bearing pile length for the relocated unit, to the next 100 mm (foot), by a straight line interpolation, using the bearing pile length of the as-designed, pile supported unit and zero length at the spread foundation supported unit. However, do not use lengths of less than 3000 mm (10 feet) for determining the bid quantity.

o For relocated substructure units, test pile lengths, which are included in the lump sum price for the alternate design bridge structure, are to be the average lengths determined using the procedures specified above. The load test pile length at a relocated substructure unit is to be the same as the bearing pile length at that unit.

o For the purpose of determining pile lengths at relocated substructure units, consider a unit relocated if the average distance from the closest, as-designed unit is 6000 mm (20 feet) or more. Determine the average distance as specified above.

Show the estimated quantities of as-designed load test piles, test piles, bearing piles, and pile tip reinforcement used in an alternate design on the alternate design plans when submitted for approval. Show test pile lengths, included in the lump sum price bid for the alternate bridge structure, and load test pile length, included in the lump sum price bid for load test piles, in the estimated quantities. Tabulate piling quantities using a format similar to that used for the "as-designed" bridge structure. Show alternate design bid quantities for load test piles, bearing piles, and pile tip reinforcement for comparison with approved, as-designed, estimated quantities.

Value Engineering of as-designed piles used in an approved alternate design bridge structure is allowed.

If as-designed piles for a relocated substructure unit in an alternate design cannot be driven, thereby necessitating a redesign of the substructure unit, furnish the revised design and complete construction drawings as part of the lump sum price bid for the alternate bridge structure.

If the as-designed pile layout can not be used in an alternate design involving a relocated substructure unit, alternate design piles will be measured and paid for as part of the lump sum price bid for the alternate bridge structure. Exclude from the bid all pile load tests specified for as-designed piles which are replaced by alternate design piles.

Compute the pay quantity for as-designed bearing piles incorporated into an alternate design as follows:

Case 1: If D and E are less than or equal to B, the Pay Quantity = D

Case 2: If D and E are greater than B, the Pay Quantity = D - (E-B)

Case 3: If E is greater than B but D is equal to or less than B, the Pay

Quantity = D

For all other cases, use D as the Pay Quantity.

where:

D = Actual acceptable driven quantity per structure

B = Bid quantity per structure entered in the Project Items and Quantities.

E = Estimated quantity per structure shown on the approved

alternate drawings.

III. MATERIAL - As indicated and as specified for the "as-designed" bridge structure; in accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto; and/or the Special Provisions for each respective item included in the bridge structure.

IV. CONSTRUCTION - In accordance with applicable Sections of the Specifications, Publication 408, and numbered changes thereto in effect before the letting date; the Special Provisions for each respective item; and any additional requirements contained herein. Submit construction procedures for an alternate design, for acceptance, if other than those contained herein.

Erection methods are open, but submit the proposed method to the Chief Bridge Engineer for approval.

If utility relocations are required to accommodate the proposed locations of substructure units in an alternate design, be responsible for the cost of the utility relocations and any related delay claim costs.

V. MEASUREMENT AND PAYMENT - Lump Sum

For the type of alternate design bridge structure selected, subject to a reduction equal to the amount of the Contractor's share of the Department's engineering costs to be determined as follows:

- For each alternate bridge structure with lump sum bid item amount less than $2,000,000 = 2% of the lump sum bid amount for structure

- For each alternate bridge structure with lump sum bid item amount over $2,000,000 = $40,000 plus 0.25% of the lump sum bid amount over $2,000,000, total amount not to exceed $85,000

Each alternate bridge structure involving a redesign from cast-in-place diaphragms to precast diaphragms will be subject to a reduction of $300 per structure if contractor's bid lump for lump sum item is less than $2,000,000 and a reduction of $750 per lump sum item if structure is over $2,000,000, for the amount of the Contractor's share of the Department's engineering cost.

The Contractor's share of the Department's engineering costs will be recovered by processing a contract adjustment (Alternate Design Review) to reduce the contract lump sum price by an amount equal to the Contractor's share.

A utility company's share of fabricated structural steel and/or installation of sleeves, inserts, casings, hanger assemblies, ducts, etc. for utilities is to be a separate item. Do not include the utility company's share in the bid price for the alternate design bridge structure unless otherwise specified.

For an alternate design bridge structure, all items of work are to be included in and will be paid for as part of the contract lump sum price; except, bearing piles; pile tip reinforcement; pile load tests; dynamic pile testing; Class C cement concrete under footings; Class 3 excavation, reinforcement bars, and Class A cement concrete for pedestals; and caissons.

Placing deck concrete in excess of the indicated quantity will not be considered a change from the design. The contract lump sum price for each alternate bridge structure includes full compensation for all deck concrete.

(a) Bridge Structure As Designed. If the "as-designed" bridge structure is bid, submit the "Component Item Schedule", included with the Proposal, as specified in Section 103.01(a).

Make the "Total" at the end of the "Component Item Schedule" equal the amount of the lump sum bid for Bridge Structure as Designed.

(b) Alternate Bridge Structure. If an alternate design bridge structure is bid, the apparent low bidder is required to submit a "Component Item Schedule for Alternate Design" as specified in Section 103.01(a). No adjustments will be made to the contract lump sum price bid for alternate design bridge structure for any field adjustments necessary to complete the structure.

Make the "Total" at the end of the "Component Item Schedule for Alternate Design" equal the amount of the lump sum bid for Alternate Bridge Structure.

(c) Alternate Structure Design Costs. The apparent low bidder is to include a component item for Alternate Design Costs in the Component Item Schedule when an alternate design is bid. Include the cost of this item in the total of the lump sum bid price. Payment of 25% of the total design costs will be made upon approval of the preliminary conceptual design. The remaining amount will be paid for in a proportionate manner, designated by the Department, on the basis of approval of the final design.

00 - cHIGH PERFORMANCE CONCRETE

Addendum:

Associated Item(s):

Header:
HIGH PERFORMANCE CONCRETE

Provision Body:

HIGH PERFORMANCE CONCRETE

In accordance with Section 1001 and as follows:

Section 1001.1 DESCRIPTION- Revise as follows:

This work pertains to bridge construction and other cement concrete work. This work also consists of furnishing, placing and curing structural Portland cement concrete for use in high performance concrete (HPC) bridge decks, approach slabs, and parapets as indicated and as directed by the Representative.

Section 1001.2(a) Cement Concrete. Revise as follows:

Section 704 except as follows:

Delete Table A, Cement Concrete Criteria.

Use the following criteria for HPC mix:

· Select a range of water cementitious ratio, for the mix to be produced, from a maximum of 0.45 to a minimum of 0.40.

· Sand Fineness Modulus Range = 2.6 to 3.1

· Minimum mix design 28 day compressive strength = 27.6 MPa (4000 psi)

· A 28 day to 7 day compressive strength ratio of greater than or equal to 1.33

Section 704.1(a) Description. Revise as follows:

Cement concrete is a mixture of Portland cement, fine aggregate, coarse aggregate, water and air-entraining admixture, with or without water reducing admixture, retarding admixture, micro-silica, fly ash, ground granulated blast furnace slag, or property enhancing admixture. Furnish a mix that provides well graded aggregates, sufficient workability, low chloride penetration permeability, shrinkage resistance, low heat of hydration, freeze-thaw resistance, abrasion resistance, low alkali-silica reactivity, and adequate strength.

Section 704.1(b) Material. Add the following bullet:

· Micro-silica – Section 724 except as follows:

The use of micro-silica in the HPC mix design is optional. For any use of micro-silica, supply the micro-silica as a dry powder or slurry. Only one brand may be specified for any one structural element. Certify materials as specified in Section 106.03(b)3.

The proposed use of a micro-silica admixture must be as listed in Publication 35, Bulletin 15, and conform to the requirements of AASHTO M-307 including the optional chemical and physical requirements, including the following:

a. Fineness: Maximum 5.0% retained on a 45-µm sieve (wet method).

b. Uniformity of Percent Solids (Slurry): Maximum +5% from the accepted value.

Micro-silica slurry must be maintained in storage above the temperature of 0 degrees Celsius (32 degrees Fahrenheit). Slurries exposed to temperatures of 0 degrees Celsius (32 degrees Fahrenheit) or less must be removed or replaced at no cost to the Department. The slurry must be homogeneous and agitated as necessary to prevent separation. For each shipment supplied, the certification must list fineness, silica content, total chloride ion content, and solids content for slurries.

Section 704.1(c) Design Basis.

1. General. Revise as follows:

Base concrete mix design on the material to be used in the work. Select a water cement ratio range within the allowable maximum and minimum that will be used during production.

Make trial mixtures and computations including the molding and curing of test specimens at the proposed minimum and maximum water cement ratio. Prepare and compute each design in accordance with Bulletin 5, except that over design strength must be a minimum of 3.4 MPa (500 psi) and w/c ratio may be computed in increments of 0.01.

Submit a copy of each completed mixture design to the District Materials Engineer at least thirty (30) days prior to its trial use in the work. Submit type of mixer and mixing procedures planned for the project with the final mixture design for approval. The Department reserves the right to review any design through plant production prior to using for Department work at no additional cost to the Department.

At least two weeks prior to its use, mix a minimum of 6.11 cubic Meter (8 cubic yard) trial Placement Mixture using the approved mixture design and the type of placement procedure planned for the project as directed by the District Materials Engineer. All data relevant to Section 704.1(b), Material, regarding the mix design will be forwarded to the Bureau of Construction and Materials and District Office for review and comment before pouring the trial mixture. The Bureau of Construction and Materials and the District Office must be contacted at this time to witness both mixture design specification and trial mixture.

This Placement Mixture must be placed in a 'mock-up' form and evaluated for workability, slump, and plastic air content using similar finishing operation as that proposed for the placement mix operation. Place the placement mixture in a form having the following minimum dimensions:

· Depth: 8 inches

· Width: 10 feet

· Length: 10 feet

Reinforcing steel is not required for the trial placement.

Four (4) cylinders each must be molded. Two (2) cylinders must be field cured and two (2) cylinders must be lime bath cured. Determine the seven (7) day and fourteen (14) day compressive strengths. Follow PTM 611. If any portion of the trial placement does not meet specification, corrections must be made and the trial placement must be performed again.

Compliance is based on the contractor's test results as witnessed and verified by the Representative. Perform sampling and testing at the mixing site. Submit results to the Representative. Take samples of the stockpiles located at the concrete plant during the placement of the bridge deck. Take samples for gradation control from daily stockpile or in accordance with an approved Quality Control Plan. Take and test samples in accordance with PTM 1, PTM 616, and PTM 100.

2. Cement Factor. Delete

3. Air content. Revise the last sentence of the last paragraph as follows:

The entrained air in the hardened concrete must be between 4.0% and 7.5%, inclusive.

4. Mix Design Acceptance. Delete the second and third paragraph and add the following:

As part of the trial mixture acceptance, provide a mixture that meets the following requirements as performed by a certified laboratory acceptable to the Department. Conduct Laboratory Testing by a laboratory with current accreditation Program (AAP) for the Portland Cement Concrete area or having documentation of current Cement and Concrete Reference Laboratory (CCRL) inspection, including evidence of correction of any deficiencies noted in the AAP or CCRL inspections.

Part A: Required Concrete Testing: These preliminary mix design tests must be passed at both the proposed minimum and maximum water cement ratio and proposed admixtures and contents. All tests within this part will be prepared and tested under controlled conditions within a certified laboratory acceptable to the Department.

Part A.1 Maximum Permeability Amended AASHTO T-277 (Coulombs): 2000 coulombs, maximum. Prepare the test specimens to perform rapid chloride permeability (AASHTO T-277). The permeability samples must be cylindrical specimens with a 102 millimeter (4") diameter and at least 102 millimeter (4") in length. Moist cure similar to the strength cylinders for acceptance except that the last three (3) weeks of cure at one-hundred (100) degrees F, with a tolerance of - 12.2 degrees Celsius (10 degrees Fahrenheit). The curing period must be twenty-eight (28) days. Cylinders must be tested at twenty-eight (28) days in accordance with AASHTO T-277. The test result is of the average values of three (3) sets of two (2) test specimens from each batch.

Part A.2 Compressive Strength PTM No. 604 (PSI). Minimum F28 (day): 27.2 MPa (4000 psi).

· Minimum F'(c): 27.2 MPa (4000 psi) - A reduced payment penalty will be enforced for all deck concrete that does not meet this minimum strength requirement.

· Minimum F'(cs). 24 MPa (3500 psi).

· Maximum F'(c): 41.4 MPa (6000 psi). This value must not be exceeded during the laboratory testing of the mix design.

When calculating the water cement ratio and a portion of the cement is replaced by Pozzolan, use water to cement plus Pozzolan ratio by mass 28 day to 7 day compressive strength ratio greater than or equal to 1.33. The Bureau of Construction and Materials will conduct a Quality Assurance Test of the Compressive Strength.

Part A.3 Air Content of Hardened Concrete ASTM C457: The mix design must meet a minimum air entrainment of 4.0% in the hardened concrete state. Provide the proposed mix design to the laboratory performing the test procedure. Report the entrained air content, entrapped air content, and spacing factor.

Part A.4 Specific Heat of Hydration ASTM C186: The mix design must use a combination of cementitious material that will provide a Specific heat of hydration to a maximum of 135.3 BTU/pound (75 calories per gram) at seven (7) days.

Part A.5 Alkali Silica Reaction (ASR): In order to prevent ASR, the components of this mix must meet one of the following two (2) Test Criteria:

a. AASHTO T303: Test results for both coarse and fine aggregates intended for use in the mix are < 0.10% linear expansion, or < 0.08% linear expansion if the aggregates come from a source consisting of metamorphic rocks, OR;

b. ASTM C 441: Use a combination of cement and mineral admixture(s) which reduces expansion in ASTM C 441 mortar bars by at least 65% at 56 days. In no case must the amount of mineral admixture utilized in the mix be less than the following:

Mineral Admixture Cementitious Material Percentage

Class F fly ash 15% (min)

Class C fly ash 15% (min)

Class N Pozzolan No minimum

GGBSF 25% (min)

Silica Fume 5% (min)

For cementitious Material Percentage, measure the minimum content of cementitious material as percent cement plus mineral admixture. Waive these minimums when used in combination with other mineral admixtures

Part A.6 ShrinkageASTM C157 (Microstrain): Less than 500 microstrain in 28 days. Prepare concrete test specimens according to the procedures in ASTM C157. Remove the concrete specimens from the molds at 23½ ± ½ hour after the addition of water to the cement during the mixing operation. Upon removal of the specimens from the molds, place them in a lime-saturated bath at 73.4° ± 1° F (23° ± 0.5° C) for 30 minutes before measuring the initial length comparator reading. Follow the procedures stated in ASTM C157 for measuring the length of each specimen. After the initial reading, store the specimens in a moist cabinet or room at 73.4° ± 3° F (23° ± 1.5° C) in accordance with ASTM C511 for 7 days before measuring the second comparator reading. After the 7th day, store the specimens in air in a room maintained at 73.4° ± 3° F (23° ± 1.5° C) and 50 ± 4% relative humidity according to ASTM C157. Measure length change after 4, 7, 14, and 28 days of air storage. The test result is the average length change value of the three test specimens over the 28 days of air storage.

Part B: Informational Concrete Testing: The following additional tests are required for informational concrete testing purposes only. The mix which best meets the test requirements and provides reasonable workability will be selected. The individual results will not be considered as a basis of payment. The results indicated for these informational tests are target values only. All tests within this part will be prepared and tested under controlled conditions within a certified laboratory acceptable to the Department.

Part B.1: Resistance of Concrete to Chloride Ion Penetration AASHTO T259: The Contractor will supply four (4) Test specimens for both design and placement mixes for testing. Specimens must meet the following criteria as specified in FHWA Report FHWA RD 78.35:

a. At the 12.7 millimeter (0.5") to 25.4 millimeter (1.0") level, the Cl– content at the 95% confidence limit should be no higher than 1.44 kilogram/cubic meter (2.43 lbs./cubic yard).

b. At the 1.58 millimeter (1/16") to 12.7 millimeter (0.5") level, the Cl– content at the 95% confidence limit should be no higher than (7.21 kilogram/cubic meter (12.16 lbs./cubic yard).

If the specimen result does not meet both a and b, then it fails the ponding test. See Attachment A for example of confidence limit calculation.

Part B.2: Scaling Resistance ASTM C 672 (Visual Rating). A visual rating of the concrete surface for fifty (50) cycles. One cycle is 24 hours in duration. Visual rating performance (X) for this mixture design measured as X = 1.

Part B.3: Freeze-Thaw Durability AASHTO T161 Procedure A (Relative Modulus, 300 Cycles). Measured in terms of the relative dynamic modulus of elasticity after 300 cycles of freeze-thaw. The freeze-thaw performance for this mixture design measured as 80% < Relative Dynamic Modulus of Elasticity < 90%.

Part B.4: Abrasion Resistance ASTM C944 (wear depth, millimeters): The abrasion resistance is measured as millimeters of wear depth (X). The performance for this mixture design must be measured as 0.5 < X < 1.0.

Section 704.2(c). Mixing and Delivery. Revise fourth paragraph, second bullet, last sentence to read:

Do not exceed a total of 300 truck- drum revolutions including discharge. When Silica Fume is used in the mixture, mixing revolutions will require a maximum of 200 truck-drum revolutions.

Section 1001.3(h). Consistency of Concrete at the Time of Placement. Add the following:

The supplier will provide concrete with a water cement ratio within the limits successfully tested and approved during the mix design process.

Section 1001.3(k)1. General Requirements. Revise first paragraph, by adding the following after the first sentence.

The plan must include the methods and sequence of placing concrete and provisions to monitor air temperature, relative humidity, and wind speed and how deck location conditions will be predicted during anticipated duration of the pour to maintain conditions at the point of placement within the limitations of Section 1001.3(k)6.

Add to fourth (4th) paragraph:

Do not float finish fresh concrete for bridge decks, except where needed at gutter line, scuppers, expansion dams, or isolated locations on the deck for required grade.

Section 1001.3(k)4.b Determining QC and Acceptance Testing Location. Revise entirely to read:

Acceptance testing will be conducted from samples obtained at the point of placement.

Section 1001.3(k)6. Bridge Decks. Revise first (1st) paragraph to read:

At least 2 weeks before concrete deck placement, schedule a deck pre-placement meeting to review the specification, method and sequence of placing deck concrete, quality control testing, and method of protective measures to control the concrete evaporation rate. Place concrete at a concrete temperature of between 10 °C and 27 °C (50 °F and 80 °F). Provide the necessary equipment and determine the evaporation rate before starting deck placement and every hour during the placement. The evaporation rate for exposed finished concrete is determined using ACI 305R-91, Figure 2.1.5. The allowable evaporation Rate for exposed finished concrete will not exceed 0.0071 kPa/hr (0.10 lbs./S.F./hr) of exposed surface for micro-silica concrete mix and 0.0088 kPa/hr. (0.15 lbs./S.F./hr) of exposed surface for all other concrete mix using the ACI 305R-91, Figure 2.1.5. The measurements for air temperature, relative humidity, and wind speed must be taken as near as possible to the final placement of the concrete. The measurements must be performed at least once per hour, beginning with the initial concrete placement. Additional measurements may be required by the contractor if changes in the atmospheric conditions occur, or as directed by the Representative. Have readily available and set-up for operation, at the bridge deck placement site, all remediation equipment and procedures as submitted and approved at the deck pre-placement meeting before starting the placement. If the value is exceeded, stop concrete placement until protective measures are taken to reduce the values to an acceptable level. Fog cure misting may be an acceptable method to mitigate an excessive evaporation rate. Use high pressure equipment that generates at least 8.3 MPa (1,204 pounds per square inch) at 8.3 L per minute (2.19 gallons per minute), or with low pressure equipment having nozzles capable of supplying a maximum flow rate of 6.3 L per minute (1.66 gallons per minute). Use nozzles that atomize droplets and can keep a large surface damp without causing water deposits. Apply the fog over the entire placement that is not covered by wet burlap. Fog cure misting may be used from concrete discharge to finishing area only to maintain the evaporation rate below the allowable value. Do not leave concrete exposed for extended duration. Place concrete 1.5 m to 2.5 m (5 feet to 8 feet) ahead of finishing machine to prevent any premature concrete drying.

Revise sixteenth (16th) paragraph to read:

Conduct operations behind the finishing machines or screeds from work bridges of rigid construction, not in contact with the surface of the concrete, set on rails and easily moved. Provide a smooth, accurate surface by the finishing machines. Do not float finish fresh concrete for bridge decks, except where needed at gutter line, scuppers, expansion dams, or isolated locations on the deck for required grade or to provide an adequate finish. Fog misting equipment is allowed on the finishing machine to maintain the evaporation rate below the allowable value.

Revise the eighteenth (18th) paragraph to read:

Perform straightedge testing and surface correction as specified in Section 501.3(k)3 while the concrete is workable. Check the bridge deck at 3000-millimeter (10.0 ft.) intervals with a 3000 millimeter (10.0 ft.) straightedge. After completing the straightedge testing and surface corrections, before the concrete becomes non-plastic, texture the surface as specified in Section 501.3(k)4. Cure the deck as specified in Section 1001.3(p)3.b. Apply wet burlap covers immediately following finishing and as specified in Section 1001.3(p). Minimal marking of the fresh concrete is allowed. Maintain wet burlap application within 3 ½ m to 6 m (10 feet to 18 feet) behind the finishing equipment at all times.

Section 1001.3(p)1.b Curing Temperature. Revise by adding:

Control the temperature of Concrete placed for bridge decks and/or bridge beams at the time of placement and during the first 48 hours of cure after each pour or pour sequence to maintain a maximum temperature differential of 22 degrees F between the concrete and the mean beam temperature for each deck as determined by Hi-Lo Thermometers.

Section 1001.3(p)3.b Water Curing Revise the third (3rd) paragraph by adding:

Cure bridge deck for minimum of fourteen (14) days. Water cure according to the procedures as submitted and approved at the deck pre-placement meeting.

Section 1001.3(q)2.c Live Loads. Revise first (1st) paragraph as follows:

Do not allow power-operated buggies, diamond grinding, and diamond saw grooving to cross a deck until fourteen (14) days after the deck concrete in a span has been placed and then only if the combined weight of the equipment is less than 10,000 pounds and the deck concrete has attained a minimum compressive strength of 3,000 pounds per square inch.

Revise third (3rd) paragraph, last sentence as follows:

This authorization will be given as follows:

· A truck mixer not exceeding 8.0 kilometers/ hour (5 m.p.h.) can be placed on the deck for construction of other concrete appurtenances when the concrete in the deck has attained a minimum strength of 23 MPa 3350 pound per square inch and after minimum seven (7) day wet cure. Only one truck will be allowed on the deck at a time in a span or continuous unit for each truck placement occurrence.

· Bridge deck open to traffic after a period of 14 days after placing the last deck concrete and a minimum deck concrete strength of 27.6 MPa (4000 pounds per square inch), and;

· After a period of seven (7) days after placing the last parapet concrete and a minimum parapet concrete strength of 21 MPa (3000 pounds per square inch) in parapets.

Revise fourth (4th) paragraph as follows:

Do not construct parapets on new decks until five (5) days after placing the deck concrete and then only if the deck concrete has attained a minimum compressive strength of 21 MPa (3,000 pounds per square inch).

Revise fifth (5th) paragraph as follows:

Do not permit trucks or heavy equipment to travel in a lane adjacent to parapets until seven (7) days after placing the parapet concrete and then only if the parapet concrete has attained a minimum compressive strength of 21 MPa (3000 pounds per square inch).

Section 1001.4 (a) Cement Concrete – Revise “Cement Concrete” to “High Performance Concrete” and add the following:

Reduction in payment due to deficiencies according to Section 110.1 as revised.

Section 110.10(b) Definitions. Revised as follows:

Definitions:

· F'(28-Day). The 28-day minimum mix design concrete compressive strength of 28 MPa (4000 psi).

· C28: Correction Factor for 28-day minimum mix design concrete compressive strength (MPa (psi)) as specified in Section 110.10 Table B "Correction Factor for Quality Index (QL)". Revise Table B Class of Concrete "AAA" to "High Performance Concrete."

· F'(c): 28-Day structural design concrete compressive strength of 4000 psi (28 MPa).

· Cc: Correction Factor for 28- day structural design concrete compressive strength (MPa (psi)), as specified in Section 110.10 Table B "Correction Factor for Quality Index (QL)". Revise Table B Class of Concrete "AAA" to "High Performance Concrete."

· F'(cs): 3500 psi (24 MPa)

· Ccs: Correction factor for minimum allowable concrete compressive strength (MPa (psi)) as specified in Section 110.10 Table B "Correction Factor for Quality Index (QL)". Revise Table B Class of Concrete "AAA" to "High Performance Concrete."

Delete Table A, "Minimum Concrete Compressive Strength Requirements."

Section 110.10 (d) Evaluation, Disposition, and Payment of Low Strength Cement Concrete Using Concrete Core Specimens. Revised as follows:

Revise Table B "Correction Factor for Quality Index (QL)", Class of Concrete "AAA" to "High Performance Concrete" and use the existing assigned Correction Factors (Cx).

Section 110.10(d)1.a PWL F’(cs). Revised as follows:

The percent tolerance relative to F'(cs), PWL F'(cs), will be calculated in accordance with Section 106.3(a)3 (except the corrected Quality Index Q'L, as specified in Table B, will be used in place of QL) using F'(cs) value for specified High Performance Concrete placement mix, as the lower limit and the core strengths as lot measurements.

Revise Second Bullet Point, Second Sentence as follows:

Remove and replace deficient lot of High Performance Concrete placement mix, at no additional cost to the Department, unless otherwise directed, in writing, by the Representative.

Section 110.10(d)2.b PWL F'(28-day). Revised as follows:

The percent tolerance relative to F'(28-day), PWL F'(28-day), will be calculated in accordance with Section 106.3(a)3 (except the corrected Quality Index Q'L, as specified in Table B, will be used in place of QL) using the 28-day minimum compressive strength requirement for the specified High Performance Concrete placement mix, as the lower limit and the core strengths as lot measurements.

MEASUREMENT AND PAYMENT -

This work is component of following Item(s):

EITHER ITEM 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905

OR ITEM 8110-0002 BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905

OR ITEM 8100-0002 STEEL BRIDGE STRUCTURE

00 - ITEM 0901-0001 - MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Addendum:	3
Associated Item(s):	0901-0001

Header:
MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION

Provision Body:

In accordance with Section 901 and as follows:

(a) General:

Perform Maintenance and Protection of Traffic for the project will be performed in accordance to the Traffic Control Plans, Publication 213 and Publication 408/2011 and as follows:

The contractor will designate an individual (or individuals) as Traffic Control Supervisor(s) responsible for the maintenance and traffic control items. Furnish the name(s) of the Traffic Control Supervisor(s), address, and telephone number where he/she can be reached at all times.

Traffic Control devices and signs necessary for the current maintenance and protection of traffic exist at present and are being maintained by department. Existing traffic control devices and signs are the property of the department. Deliver all of the existing traffic control devices and signs to the Bucks County Maintenance Office. The contact and address of the Bucks County Maintenance Office are listed below:

Calvin Morrison - County Maintenance Manager

229 North Broad Street

Doylestown, PA 18901

Install and maintain the traffic control for the duration of the project as indicated. Coordinate with the appropriate utility companies for all utility relocation indicated in the Contract Documents.

Short-term operations must take place as defined in the appropriate PATA in Publication 213. No work is to be done on holidays. Maintain at least one open mainline traffic lane in each direction at all times throughout construction in accordance with the PATA's in Publication 213, except as detailed on traffic control plans and as directed.

Maintain ramp traffic at all times, except when construction of the pavement near the ramp tie-in location does not permit safe vehicular movements. Short-term ramp closures must be approved by the Engineer prior to implementation. If the Contractor proposes long-term ramp closures in addition to those shown in the Drawings, the Contractor must submit detour plans to the Department for approval before implementation.

Ramp detours are only to be used as defined on the traffic control plans for the specific ramp area construction shown on the plans. The duration of the detour will be subject to PennDOT approval and must continue until all ramp work is completed.

Complete traffic stoppages at the intersection of New Ford Mill Road are required for the removal and erection of the overhead signalization equipment and poles. The Local Police will assist the Engineer and contractor during all traffic stoppages. These stoppages are not to exceed 15 minutes in length.

~~Traffic stoppages are not permitted from 5:00 AM to 1:00 AM Monday through Friday. Traffic stoppages are not permitted on Saturday or Sunday.~~ For consecutive stoppages, the Local Police will stop traffic following the preceding stoppage only after traffic has returned to normal flow. According to the traffic conditions, the Engineer will determine the time duration between stoppages. Traffic may be stopped only when weather conditions are satisfactory.

Relocate temporary signing as necessary and as indicated on the traffic control plans and Publication 213. Relocate channelization devices as necessary and as indicated on the traffic control plans and Publication 213.

Do not stop, stand, or park construction equipment or stockpile material during non-working hours in any work areas adjacent to traffic lanes, or within the clear zone area, unless equipment or material is protected by temporary concrete construction barrier. If no barrier is provided, equipment or material must be a minimum of 30 feet from the edge of traveled roadway.

Do not allow employees to park personal vehicles on any traveled roadway, shoulder, or seeded area along the highway.

No interference of any kind will be allowed to open traffic lane(s) at any time without the use of appropriate traffic control measures, including flagging operations. This includes, but is not limited to, equipment swinging into the lane(s), material or equipment being lifted over vehicular or pedestrian travel lane(s).

No staging compounds or construction trailers are allowed within the Right-of-Way, unless the adjacent roadway is closed to all traffic.

Maintain constant surveillance of the traffic control operation and replace or correct any missing, damaged, ineffective, or misaligned traffic control devices to the satisfaction of the Engineer, and/or Traffic Control Supervisor(s). All advance warning and temporary barricade signs and channelizing devices must be kept clean at all times.

Erect the "WORK ZONE - TURN ON HEAD LIGHTS" sign (R22-1) prior to each work zone, typically at a distance of 500 to 1000 feet prior to the first warning sign.

Erect the "ACTIVE WORK ZONE WHEN FLASHING" sign (W21-19) as close as practical to the beginning of the active work zone where construction workers are on the roadway or on the shoulder of the highway or are in the median of the highway, and are adjacent to an open travel lane. Attach a white type B high-intensity flashing light to the upper portion of each W21-19 sign. Activate the light only when workers are present, and deactivate it when workers are not present for 60 minutes or more.

Erect the "END ACTIVE WORK ZONE" sign (W21-20) immediately at the end of each work zone where construction workers are on the roadway or on the shoulder of the highway, and are adjacent to an open travel lane, except when the W21-20 sign would be installed adjacent to the "END ROAD WORK" (G20-2) sign.

(b) Coordination with Falls Township:

Contact Mr. Peter Gray, Falls Township Manager at (215) 949-9000 ext. 203 two weeks in advance pertaining to installation of Traffic Control devices, changes in traffic patterns, lane closures and ramp closures along Tyburn Road.

Contact the TMC and the PennDOT Press Office two weeks in advance pertaining to installation of Traffic Control devices, lane closures and ramp closures along Tyburn Road.

(c) Construction Staging Sequence:

Follow the construction staging sequence as per the Traffic Control Plans.

00 - ITEM 4309-0726 AND 4309-0730

Addendum:	2
Associated Item(s):	4309-0726, 4309-0730

Header:

ITEM 4309-0726 - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALS, 25.0mm MIX, 6” DEPTH MODIFIED
ITEM 4309-0730 – SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BASE COURSE, PG 64-22, >/= 30 MILLION ESALS, 25.0mm MIX, 8” DEPTH MODIFIED

Provision Body:

DESCRIPTION - Section 309.1

MATERIAL – Section 309.2 and**, except from STATION 101+00 to 102+00**, add the following:

(g) Fiber Reinforcement. **Fibers to be supplied by the following:**

FORTA Corporation

100 FORTA Drive

Grove City, PA 16127

(800) 245-0306

www.fortacorp.com

Provide fibers conforming to the requirements below. Design the asphalt mix without the fiber in accordance with 409. Do not alter the final mix design for the addition of fiber at the plant. Use the fiber type specified at the rate of 1.0 pounds/ton (0.5 kg/metric ton) of total mix. Furnish with the mix design submittal certified test data for the fibers to be used on the project.

1. Physical Properties

Materials……..Polyolefin/Aramid

Length……..3/4" (19mm), ~~1-1/2" (38mm)~~

Form……Twisted Fibrillated & Monofilament Fibers

Color……Yellow, Black, Tan

Specific Gravity……..0.91/1.44

Acid/Alkali/ Resistance……..Inert

Tensile Strength……..70,000 psi / 400,000 psi

Melt Temperature……212~~o~~°F / 800~~o~~°F (100~~o~~°C / 427~~o~~°C)

CONSTRUCTION – Section 309.2 and add the following:

(c) Bituminous Mixing Plant

3. Fiber Supply System. Add fiber through specialized equipment that can accurately proportion and meter, by weight (mass), the proper amount per batch for batch plants, or continuously and in a steady uniform manner for drum plants.

Provide proportioning devices that are interlocked with the plant system and controlled to ±10% if the mass (weight) of the fibers required. Perform an equipment calibration to the satisfaction of the Representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following on the fiber supply system:

1) Low level indicators

2) No-flow indicators

3) A printout of feed rate status in kg (pounds) / minute

4) A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.

Have the Representative approve all fiber addition systems.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper and increase both dry and wet mixing times. Ensure that the fiber is uniformly distributed before the injection of asphalt cement into the mixture. When a drum plant is used, do not allow the fibers to become entangled in the exhaust system. If there is any evidence of fiber in the bag-house or wet washer fines, relocate the liquid asphalt binder line and/ or the fiber line so that the fiber is captured by liquid asphalt spray and incorporated into the mix. If there is any evidence of clumps of fibers at the discharge chute, increase the mixing time and/ or intensity.

Store fiber in a dry environment.

MEASUREMENT AND PAYMENT - Square Yard.

The tabulated quantity includes approximately 665 Square Yards for the test section without fiber from Sta. 101+00 to 102 +00. The test section without fiber will be paid for under this item.

00 - ITEM 4409-1891 AND 4409-6860

Addendum: 2

Associated Item(s): 4409-1891, 4409-6860

Header:

ITEM 4409-1891 – SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE (LEVELING), PG 76-22, >/= 30 MILLION ESALS, 9.5mm MIX, SRL E MODIFIED
ITEM 4409-6860 - SUPERPAVE ASPHALT MIXTURE DESIGN, HMA BINDER COURSE, PG 76-22, >/= 30 MILLION ESALS, 19.0mm MIX, 3” DEPTH MODIFIED

Provision Body:

DESCRIPTION - Section 409.1

MATERIAL – Section 409.2 and**, except from STATION 101+00 to 102+00**, add the following:

(g) Fiber Reinforcement. **Fibers to be supplied by the following:**

FORTA Corporation

100 FORTA Drive

Grove City, PA 16127

(800) 245-0306

www.fortacorp.com

Provide fibers conforming to the requirements below. Design the asphalt mix without the fiber in accordance with 409. Do not alter the final mix design for the addition of fiber at the plant. Use the fiber type specified at the rate of 1.0 pounds/ton (0.5 kg/metric ton) of total mix. Furnish with the mix design submittal certified test data for the fibers to be used on the project.

1. Physical Properties

Materials……..Polyolefin/Aramid

Length……..3/4” (19mm), ~~1-1/2” (38mm)~~

Form…….Twisted Fibrillated & Monofilament Fibers

Color…….Yellow, Black, Tan

Specific Gravity……..0.91/1.44

Acid/Alkali/ Resistance……..Inert

Tensile Strength……..70,000 psi / 400,000 psi

Melt Temperature…….212~~o~~˚F / 800~~o~~˚F (100~~o~~˚C / 427~~o~~˚C)

CONSTRUCTION – Section 309.2 and add the following:

(c) Bituminous Mixing Plant

3. Fiber Supply System. Add fiber through specialized equipment that can accurately proportion and meter, by weight (mass), the proper amount per batch for batch plants, or continuously and in a steady uniform manner for drum plants.

Provide proportioning devices that are interlocked with the plant system and controlled to ±10% if the mass (weight) of the fibers required. Perform an equipment calibration to the satisfaction of the Representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following on the fiber supply system:

1) Low level indicators

2) No-flow indicators

3) A printout of feed rate status in kg (pounds) / minute

4) A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.

Have the Representative approve all fiber addition systems.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper and increase both dry and wet mixing times. Ensure that the fiber is uniformly distributed before the injection of asphalt cement into the mixture. When a drum plant is used, do not allow the fibers to become entangled in the exhaust system. If there is any evidence of fiber in the bag-house or wet washer fines, relocate the liquid asphalt binder line and/ or the fiber line so that the fiber is captured by liquid asphalt spray and incorporated into the mix. If there is any evidence of clumps of fibers at the discharge chute, increase the mixing time and/ or intensity.

Store fiber in a dry environment.

MEASUREMENT AND PAYMENT - Square Yard.

The tabulated quantity includes approximately 665 Square Yards for the test section without fiber from Sta. 101+00 to 102 +00. The test section without fiber will be paid for under this item.

00 - ITEM 4677-0001 SELECTED MATERIAL SURFACING MODIFIED

Addendum:

Associated Item(s): 4677-0001

Header:
ITEM 4677-0001 SELECTED MATERIAL SURFACING MODIFIED

Provision Body:
DESCRIPTION - This work is furnishing and placing of selected material on a prepared subgrade area.

MATERIAL – Section 677.2

CONSTRUCTION - Section 677.3 and as follows:

Add the following:

Prepare subgrade in accordance with Section 210 and as directed. Excavate, grade and backfill as required. Construct temporary access road as indicated.

When directed remove selected material surfacing and satisfactorily dispose of and restore area in accordance with Section 105.14.

MEASUREMENT AND PAYMENT – Cubic Yard

00 - ITEM 5018 REMOVAL OF PORTION OF EXISTING BRIDGE MODIFIED

Addendum:

Associated Item(s): 5018-0051

Header:
ITEM 5018 REMOVAL OF PORTION OF EXISTING BRIDGE MODIFIED

Provision Body:

In accordance with Section 1018 and as follows:

Section 1018.3(a) General. Revise by adding the following:

Submit a proposed plan of demolition to the Department showing and describing the removal methods to be used for removal of portions of the existing bridge. Have the plans and calculations completed, signed, and sealed by a Professional Engineer registered in the Commonwealth of Pennsylvania. Do not proceed with this work until written approval is received from the Representative.

Removal under this item of work includes removal of the existing bridge superstructure and designated portions of the substructure as indicated on the plans.

Remove debris caused by the removal operations to the satisfaction of the Representative.

Repair or replace any portion of the structure damaged beyond the limits designated for removal to the satisfaction of the Representativ at no additional cost to the Department.

Disassembly of existing steel members with a cutting torch requires compliance with OSHA and DEP regulations regarding lead based paint removal.

The disassembled structural steel is superfluous and of no use to the Department. Hence, this item of work includes the conveyance of ownership of the steel to the contractor as scrap metal to be recycled. The contractor must handle, process, and recycle this scrap metal in accordance with federal law (including 40 CFR 261) and state regulations (including Section 25 PA Code 260). Prior to removing the steel from the project, stabilize the existing coating by applying a paint, mastic, etc. to the areas of flaking/loose paint to bond them to the substrate.

MEASUREMENT AND PAYMENT - Lump Sum

00 - ITEM 5090-0091 REPAIR DETERIORATED CONCRETE MODIFIED

Addendum: 2

Associated Item(s): 5090-0091

Header:
ITEM 5090-0091 REPAIR DETERIORATED CONCRETE MODIFIED

Provision Body:

DESCRIPTION - This work is repairing the spalled and deteriorated concrete areas as indicated, as specified herein, or as directed.

MATERIAL -

Epoxy Bonding Compound - ASTM C881. Certify as specified in Section 106.03(b)3.

Class AA Cement Concrete - Section 704 except use No. 8 coarse aggregate.

Reinforcement - Section 1002.2.

CONSTRUCTION -

(a) Surface Preparation: The extent of the repair areas will be determined and delineated by the Representative. Outline the area with a 3/4" deep saw cut prior to the removal of the deteriorated concrete. Exercise care so as not to cut the existing reinforcement bars. If during the deteriorated concrete removal it is found that the limits of the repair area need to be extended, delineate the additional area with 3/4" deep saw cut as directed.

Do not damage existing reinforcement bars or the concrete that is to remain in place during the removal operation. Repair or replace any damage to the structure beyond the removal area caused by removal operation to the satisfaction of the Representative.

Blast clean the reinforcement bars that are exposed due to the removal operations to remove all rust and other foreign materials. Provide a minimum clearance of 3/4" around all exposed reinforcement bars.

Satisfactorily dispose of all removed material.

Blast clean the existing concrete that is to come in contact with non-shrink grout or new concrete to remove loose concrete chips and surface laitance. Apply epoxy bonding compound to the cleaned surfaces just prior to placing the patching material. Application of an epoxy bonding compound is not required where polymer modified mortar is used.

(b) Equipment: Use power driven hand tools for removal of deteriorated concrete conforming to the following restrictions:

1. Do not use pneumatic hammers heavier than nominal 30 pounds.

2. Do not operate pneumatic hammers or mechanical chipping tools at an angle in excess of 45 degrees relative to the surface of the concrete that is being removed.

Use hand tools such as hammer and chisels or small air chisels to remove final particles of unsound concrete or to provide necessary clearance around the reinforcement bars.

(c) Patching:

Use forms and Class AA cement concrete. Consolidate concrete by surface vibration. Use epoxy resin anchors and steel wire fabric when the removal area is 3" or greater in depth as indicated.

Cure in accordance with Section 1001.3(p).

MEASUREMENT AND PAYMENT - **Square Foot**

00 - ITEM 9000-0002 - CATENARY STRUCTURE N-567A, AS DESIGNED

Addendum:

Associated Item(s): 9000-0002

Header:

ITEM 9000-0002 - CATENARY STRUCTURE N-567A, AS DESIGNED

Provision Body:

DESCRIPTION - This work is the furnishing and fabricating of the steel Catenary Structure N-567A. Work includes excavation, temporary excavation support and protection systems and concrete foundations. Incidental to this work is the concrete foundation repairs of existing structure N-567. This work excludes the erecting of the steel structures.

MATERIAL AND CONSTRUCTION -

Complete all work in accordance with the following attachments: AREMA specifications at the time of advertisement, Amtrak Specifications, AED-1, Amtrak Catenary Structure Loading, Design Criteria and Standard, AED-2 Amtrak Special Provision. The AREMA specifications can be found at the following website: http://www.arema.org/publications/mre.index.aspx

Conform all new structural steel to ASTM standards, designation A992 grade 50 for rolled shapes, A36 for all other shapes.

Galvanized all new structural steel in accordance with ASTM A123 and A153.

Clean all galvanized steel items cut or modified in field with a wire brush and painted with one brush coat or two spray coats of zinc repair material in the affected areas.

Concrete compressive strength shall be 4000 psi at 28 days.

MEASUREMENT AND PAYMENT: Lump Sum

00 - ITEM 9000-0003 - CATENARY STRUCTURE N-568A, AS DESIGNED

Addendum:

Associated Item(s): 9000-0003

Header:

ITEM 9000-0003 - CATENARY STRUCTURE N-568A, AS DESIGNED

Provision Body:

DESCRIPTION - This work is the furnishing, fabricating and erecting steel Catenary Structure N-568A. Work includes excavation, temporary excavation support and protection systems and concrete foundations. Incidental to this work is the concrete foundation repairs of existing structures N-568 and N-569. The work excludes the erecting of the steel structures.

Complete all work in accordance with the following attachments: AREMA specifications at the time of advertisement, Amtrak Specifications, AED-1, Amtrak Catenary Structure Loading, Design Criteria and Standard, AED-2 Amtrak Special Provision. The AREMA specifications can be found at the following website: http://www.arema.org/publications/mre.index.aspx

Conform all new structural steel to ASTM standards, designation A992 grade 50 for rolled shapes, A36 for all other shapes.

Galvanize all new structural steel in accordance with ASTM A123 and A153.

Clean all galvanized steel items cut or modified in field with a wire brush and painted with one brush coat or two spray coats of zinc repair material in the affected areas.

Concrete compressive strength shall be 4000 psi at 28 days.

MEASUREMENT AND PAYMENT: Lump Sum

00 - ITEM 9000-0004 - GROUNDING AND BONDING

Addendum:

Associated Item(s): 9000-0004

Header:
ITEM 9000-0004 - GROUNDING AND BONDING

Provision Body:
DESCRIPTION - This work is the furnishing of the bridge and catenary structures grounding and bonding system for the Tyburn Road Overhead Bridge as indicated on the drawings.

Complete all work in accordance with the following attachments: AREMA specifications at the time of advertisement, Amtrak Specifications, AED-1, Amtrak Catenary Structure Loading, Design Criteria and Standard, AED-2 Amtrak Special Provision. The AREMA specifications can be found at the following website: http://www.arema.org/publications/mre.index.aspx

MEASUREMENT AND PAYMENT: Lump Sum

00 - ITEM 9203-0666 UNEXPECTED REGULATED FILL AND HAZARDOUS WASTE

Addendum:

Associated Item(s): 9203-0666

Header:
ITEM 9203-0666 UNEXPECTED REGULATED FILL AND HAZARDOUS WASTE

Provision Body:
DESCRIPTION - This work is the management of any unexpected regulated fill and hazardous waste encountered during the contract life, as directed. If unexpected regulated fill is encountered at the site, the Representative will investigate the conditions, determine the extent of the affected area, and authorize the Contract, in writing, to remove and dispose of the waste. If it is determined that the unexpected fill is hazardous, Section 104.08 applies. Hazardous waste is defined as material meeting the definiion of a hazardous waste or Toxic Substance Control Act, Regulated PCB Waste, as specified in 40 CFR 260 or 25 PA Code, Chapters 260 to 270, Hazardous Waste Regulations.

MATERIAL - As required, including if necessary, any Personal Protection Equipment (PPE).

CONSTRUCTION - In accordance with all applicable sections of Pub 408; PA Department of Environmental Protection (DEP) rules or regulations; Environmental Protection Agency (EPA) rules and regulations; and as directed, perform any or all of the following waste management operations:

- Development of Healty and Safety Plan (HASP), decontamination procedures, a contingency plan, and a personal protection program.

- Development of a Work Site Plan describing all waste management work activities and sampling that may be conducted on the site.

- Excavation, air monitoring and dust control

- Temporary on-site storage, erosion and sedimentation controls

- Disposal of waste material (on and/or off site disposition)

This is a non-inclusive list provided for information only.

Comply with all Federal, State and local laws, rules and regulations.

MEASUREMENT AND PAYMENT - Dollar

00 - ITEM 9404-0012 - PAVEMENT RIDE QUALITY INCENTIVE AND PAYMENT OF INCENTIVE, SCHEDULE B

Addendum:

Associated Item(s): 9404-0012

Header:
ITEM 9404-0012 - PAVEMENT RIDE QUALITY INCENTIVE AND PAYMENT OF INCENTIVE, SCHEDULE B

Provision Body:

DESCRIPTION —

This work is evaluating a bituminous and rigid pavement surface profile and determining the ride-quality incentive associated with the pavement surface profile.

(a) General Requirements. Determine the ride quality of finished pavement surfaces, including overlaid bridge approach slabs and overlaid bridge decks. In the presence of the Inspector, measure the pavement surface profile according to PTM No. 428.

Provide the resultant International Roughness Index (IRI) data to the Representative.

The Representative will determine payment for each ride-quality lot based on the IRI.

Measure the pavement surface of the following excluded areas separate from the pavement surface profile of ride-quality lots. The Representative will not include measurements from excluded areas to determine lot incentive payment.

Pavement surfaces not constructed as a full-depth overlay, as indicated, such as the vertical transition areas at the limits of paving and at the approaches to bridges.

Bridge decks unless overlaid.

Ramps less than 457 m (1,500 feet) in length.

Tapered pavement less than 3.6 m (12 feet) wide.

Shoulders, medians, and other pavement surfaces indicated.

Pavement from 1.5m (5 feet) before and up to 1.5m (5 feet) after any appurtenances such as water boxes, manholes, railroad tracks, and inlets extending out into the pavement.

Partial lots less than 30m (100 feet).

Roadways with a posted speed limit of 65 km/hour (40 miles per hour) or lower.

Pavement that is not reconstructed with at least two of the following operations: profile milling, scratch course, leveling course, binder course, and wearing course, and on bridge decks only, a waterproofing membrane.

(b) Lot Size. A full lot is 161 m (528 feet) of a single pavement lane. The Representative will designate lots starting at the beginning limit of paving and continuing to the ending limit of paving for each pavement lane and ramp that is 3.6 m (12 feet) or wider. Do not include the length of excluded areas in the 161 m (528 feet).

The Representative will designate a partial lot at the ending limit of paving and at an excluded area, when the lot length is less than 161 m (528 feet). The Representative will evaluate a partial lot as a percentage of a full lot.

404.3 CONSTRUCTION—

(a) Equipment and Operator. Provide pavement surface profile measuring equipment that has been verified by the Department according to PTM No. 428. In the presence of the Inspector, calibrate the distance sensor and check the profile system calibration before each day's testing.

Provide an operator that is Department certified according to PTM No. 428. 404.3(b) 404.3(e) 404 - 2 Initial Edition

(b) Testing.

1. Lots. Provide the traffic control and station marking necessary to accommodate testing. Remove objects and equipment from the surface and sweep the surface as necessary to remove debris. In the presence of the Inspector, determine the pavement surface profile for each lot according to PTM No. 428. At the completion of testing, immediately submit the lot IRI data, as defined in PTM No. 428, to the Representative.

2. Excluded Areas. Provide the traffic control necessary to accommodate testing. Test the entire surface of each excluded area in stages using a 3 m (10-foot) straightedge. At each stage, hold the straightedge in contact with the surface and parallel to the roadway centerline and, in successive positions, test the pavement surface profile from one side of the excluded area to the other. Advance the test location to the next stage by moving the straightedge along the roadway centerline not more than 1.5 m (5 feet).

(c) Acceptance.

1. Lots. The Representative will compare the lot IRI to Table A in Section 404.4 to determine if the lot requires corrective action. Additionally, perform corrective action on any individual bump (must grind) where the irregularity is more than 5 mm (3/16 inch) when tested with a 3 m (10-foot) straightedge.

2. Excluded Areas. Perform corrective action where irregularities are more than 5 mm (3/16 inch) when tested with a 3 m (10-foot) straightedge. To improve the ride quality and at the Department's expense the Representative may require grinding of excluded areas that conform to the acceptable straightedge surface tolerances specified in Section 404.3(c).

(d) Corrective Action.

1. Do not produce a deviation, such as a ridge or valley with the adjacent pavement, of more than 3 mm (1/8 inch) when measured on the transverse profile. Correct a sufficient length of pavement to correct the pavement surface profile without producing additional high or low points. Retest the lots and excluded areas after completing corrective action. Perform additional measurements of the pavement surface profile, as necessary, for the Representative to determine which lots do not require additional corrective action. Correct surfaces to a uniform texture and cross section.

2. Perform all corrective action before testing for pavement depth. Use one or more of the following methods:

2.a. Carbide Grinding. Use carbide grinding for correcting areas 4.5 m (15 feet) in length or less. Use grinders of the walk-behind type that have cutting heads of carbide tipped shackles, stars, or blades and have a locking depth control to produce a uniform pavement surface texture.

Provide a pavement surface texture consisting of parallel grooves between 2 mm and 6 mm (3/32 inch and 1/4 inch) wide width a "land area" between grooves of 2 mm and 5 mm (1/16 inch and 3/16 inch). Operate the grinder by making multiple passes if necessary, with a maximum depth of any single pass of 3 mm (1/8 inch). Grind longitudinally or transversely across the pavement surface.

2.b Diamond Grinding. As specified in Section 514.3 and modified as follows:

(d) Tolerance. Delete this section. Unless otherwise approved, grind the entire lane width.

2.c Removal and Replacement. Remove the surface course of the entire pavement lane width by milling and replace at least the minimum layer depth of the specified surface course. Place more than the minimum layer depth if necessary to correct the pavement surface profile. 404.3(e) 404.4 404 - 3 Initial Edition

(e) Defective Work. A ride-quality pavement lot is defective if:

The IRI of the lot exceeds the maximum acceptable IRI specified in Table A of Section 404.4.

Any individual bump (must grind) exists in the lot where the irregularity is more than 5 mm (3/16 inch) when tested with a 3 m (10-foot) straightedge.

The surface adjacent to another ride-quality lot contains a ridge or valley of more than 3 mm (1/8 inch).

The specifications for pavement construction require removal and replacement of pavement within the ride-quality lot.

Unless the Department and Contractor agree to leave a defective lot in place as specified in Section 404.4, remove and replace defective areas and retest the ride-quality lot.

MEASUREMENT AND PAYMENT—Dollar

The proposal will include an item and a predetermined amount of money for Evaluation of Bituminous Pavement Ride Quality and Payment of Incentive. The contract item will have a unit of measure of DOLLAR, a unit price of $1.00, and a quantity equal to the predetermined amount.

Due to the incentive or bonus status of the payment being made, the provisions of Section 110.02(d) are not applicable to this item.

Measured and paid for, under the Evaluation Of Bituminous Pavement Ride Quality And Payment Of Incentive item as follows:

If the lot is not defective, Table A and the IRI for each lot will be used to determine the incentive payment for ride quality.

The incentive payment for a lot subjected to corrective action will be determined using Table A and the IRI for the lot after the Contractor completes corrective action.

The incentive payment for a partial lot will be determined as a percentage of a full lot.

After corrective action, the Contractor may leave a defective lot in place if the District Executive provides written approval and the Contractor accepts a $4,000 downward adjustment (rebate) of the amount paid for the lot.

Costs associated with evaluating pavement ride quality will not be paid for separately.

Schedule A

For Expressway Work Using Three Operations

IRI mm/km/lot (inches/mile/lot) Amount

<= 553 (35) $600

<= 790 (50) $300

<= 948 (60) $150

<= 1105 (70)* $0

> 1105 (70) Corrective Action Required

*Maximum acceptable IRI

Schedule B

For Expressway Work Using Two Operations and Non-Expressway Work Using Two or More Operations

IRI mm/km/lot (inches/mile/lot) Amount

<= 710 (45) $600

<= 868 (55) $300

<= 1105 (70) $150

<= 1420 (90)* $0

> 1420 (90) Corrective Action Required

*Maximum acceptable IRI

00 - ITEM 9409-0891

Addendum: 2

Associated Item(s): 9409-0891

Header:

ITEM 9409-0891 – SUPERPAVE ASPHALT MIXTURE DESIGN, HMA WEARING COURSE, PG 76-22, >/= 30 MILLION ESALS, 9.5mm MIX, 2” DEPTH, SRL-E

Provision Body:

DESCRIPTION - Section 409.1.

MATERIAL – Section 409.2 and**, except from STATION 101+00 to 102+00**, add the following:

(g) Fiber Reinforcement. **Fibers to be supplied by the following:**

FORTA Corporation

100 FORTA Drive

Grove City, PA 16127

(800) 245-0306

www.fortacorp.com

Provide fibers conforming to the requirements below. Design the asphalt mix without the fiber in accordance with 409. Do not alter the final mix design for the addition of fiber at the plant. Use the fiber type specified at the rate of 1.0 pounds/ton (0.5 kg/metric ton) of total mix. Furnish with the mix design submittal certified test data for the fibers to be used on the project.

1. Physical Properties

Materials……..Polyolefin/Aramid

Length……..3/4” (19mm), ~~1-1/2” (38mm)~~

Form……Twisted Fibrillated & Monofilament Fibers

Color……Yellow, Black, Tan

Specific Gravity……..0.91/1.44

Acid/Alkali/ Resistance……..Inert

Tensile Strength……..70,000 psi / 400,000 psi

Melt Temperature……212~~o~~°F / 800~~o~~°F (100~~o~~°C / 427~~o~~°C)

CONSTRUCTION – Section 309.2 and add the following:

(c) Bituminous Mixing Plant

3. Fiber Supply System. Add fiber through specialized equipment that can accurately proportion and meter, by weight (mass), the proper amount per batch for batch plants, or continuously and in a steady uniform manner for drum plants.

Provide proportioning devices that are interlocked with the plant system and controlled to ±10% if the mass (weight) of the fibers required. Perform an equipment calibration to the satisfaction of the Representative to show that the fiber is being accurately metered and uniformly distributed into the mix.

Include the following on the fiber supply system:

1) Low level indicators

2) No-flow indicators

3) A printout of feed rate status in kg (pounds) / minute

4) A section of transparent pipe in the fiber supply line for observing consistency of flow or feed.

Have the Representative approve all fiber addition systems.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper and increase both dry and wet mixing times. Ensure that the fiber is uniformly distributed before the injection of asphalt cement into the mixture. When a drum plant is used, do not allow the fibers to become entangled in the exhaust system. If there is any evidence of fiber in the bag-house or wet washer fines, relocate the liquid asphalt binder line and/ or the fiber line so that the fiber is captured by liquid asphalt spray and incorporated into the mix. If there is any evidence of clumps of fibers at the discharge chute, increase the mixing time and/ or intensity.

Store fiber in a dry environment.

MEASUREMENT AND PAYMENT - Square Yard.

The tabulated quantityincludes approximately 665 Square Yards for the test section without fiber from Sta. 101+00 to 102+00. The test section without fiber will be paid for under this item.

00 - Item 9506-0040 - PLAIN CEMENT CONCRETE PAVEMENT, 14" DEPTH

Addendum:

Associated Item(s): 9506-0040

Header:
ITEM 95060040 - PLAIN CEMENT CONCRETE PAVEMENT, 14" DEPTH

Provision Body:
DESCRIPTION – This work is the construction of plain cement concrete pavement, 14-in depth, under restricted performance specification (RPS).

MATERIALS – Section 506.2

CONSTRUCTION – Section 506.3

MEASUREMENT AND PAYMENT – Square Yard. Section 506.4

00 - ITEM 9506-0316 CONCRETE PAVEMENT CORES, 14" DEPTH

Addendum:

Associated Item(s): 9506-0316

Header:
ITEM 9506-0316 CONCRETE PAVEMENT CORES, 14" DEPTH

Provision Body:
DESCRIPTION –This work is the sampling of concrete pavement cores, 14" depth, under restricted performace specifications (RPS).

MATERIALS – Section 506.2

CONSTRUCTION – Section 506.3

MEASUREMENT AND PAYMENT – Each. Section 506.4

00 - ITEM 9619-0470

Addendum:

Associated Item(s): 9619-0470

Header:
ITEM 9619-0470 PERMANENT IMPACT ATTENUATING DEVICE, TYPE II, TEST LEVEL 3, (ENERGY ABSORBING TERMINALS, TANGENT)

Provision Body:
In accordance with section 0619.

00 - ITEM 9627-0001 - TEMPORARY CONCRETE BARRIER, GUIDERAIL STIFFENED

Addendum:

Associated Item(s): 9627-0001

Header:
ITEM 9627-0001 - TEMPORARY CONCRETE BARRIER, GUIDERAIL STIFFENED

Provision Body:
DESCRIPTION - In accordance with Section 627 except as follows:

This work is the furnishing, installing, maintaining and removing of temporary concrete barrier, guide rail stiffened, for the maintenance and protection of traffic during construction in accordance with PENNDOT Publication 213, PATA Barrier Stiffening.

MATERIAL - Section 627.2 - Revise by adding the following:

12" Standard Pavement Markings, Paint & Beads - Section 901

Barrier Stiffening - Sections 620 and 1109.

CONSTRUCTION - Section 627.3 - Revise by adding the following:

In accordance with PENNDOT Publication 213, PATA Barrier Stiffening. Install stiffener when barrier is set and before roadway is open to traffic or prior to drop off condition being exposed in work zone.

When barriers are placed in a radius, shim the area between the W beam and barrier wall as indicated in PATA Barrier Stiffening.

Place top mount delineators, side mount delineators, and 12" pavement markings as indicated or as directed.

Water blast the temporary concrete barrier with a minimum of 3,000 psi before painting. Paint pavement markings on temporary concrete barrier as directed and according to the manufacturer's recommendations.

MEASUREMENT AND PAYMENT - Linear Foot.

Includes 12" Standard Pavement Markings, water blasting of the temporary concrete barrier, all labor, materials, tools and equipment to furnish, place, maintain and remove stiffeners, drilling holes and shimming.

00 - ITEM 9628-0001 - RESET TEMPORARY CONCRETE BARRIER, GUIDERAIL STIFFENED

Addendum:

Associated Item(s): 9628-0001

Header:

ITEM 9628-0001 - RESET TEMPORARY CONCRETE BARRIER, GUIDERAIL STIFFENED

Provision Body:

DESCRIPTION - In accordance with Section 628 except as follows:

This work is the resetting of temporary concrete barrier, guide rail stiffened, for the maintenance and protection of traffic during construction in accordance with PENNDOT Publication 213, PATA Barrier Stiffening.

Section 628.2 MATERIAL - See Section 627.2 Revise by adding the following:

12" Standard Pavement Markings, Paint & Beads - Section 901

Barrier Stiffening - Sections 620 and 1109.

CONSTRUCTION - Section 628.3 and as follows: See Section 627.3 - Revise by adding the following:

In accordance with PENNDOT Publication 213, PATA Barrier Stiffening. Install stiffener when barrier is set and before roadway is open to traffic or prior to d r o p off condition being exposed in work zone.

When barriers are placed in a radius, shim the area between the W beam and barrier wall as indicated in PATA Barrier Stiffening.

Place top mount delineators, side mount delineators, and 12" pavement markings as indicated or as directed.

Water blast the temporary concrete barrier with a minimum of 3,000 psi before painting. Paint pavement markings on temporary concrete barrier as directed and according to the manufacturer's recommendations.

MEASUREMENT AND PAYMENT - Linear Foot

Includes 12" Standard Pavement Markings, water blasting of the temporary concrete barrier, all labor, materials, tools and equipment to furnish, place, maintain, and remove stiffeners, drill holes and shimming.

00 - ITEM 9660-0001, 9660-0002 AND 9660-0030

Addendum:

Associated Item(s): 9660-0001, 9660-0002, 9660-0030

Header:

ITEM 9660-0001 - LANE RUMBLE STRIPS
ITEM 9660-0002 - CENTERLINE RUMBLE STRIPS
ITEM 9660-0030 - SHOULDER RUMBLE STRIPS

Provision Body:

DESCRIPTION –

In accordance with Section 660, as indicated on the drawings and as follows:

MEASUREMENT AND PAYMENT – Linear Foot

Measured longitudinally along the centerline of the pavement. Payment includes removal and disposal of the milled material.

00 - ITEM 9810-0001 – SELECTIVE TREE TRIMMING AS DIRECTED

Addendum:

Associated Item(s): 9810-0001

Header:

ITEM 9810-0001 – SELECTIVE TREE TRIMMING AS DIRECTED

Provision Body:

DESCRIPTION – This work is the trimming of trees and shrubs, the treatment of tree injuries, and the removal of debris as directed on site.

CONSTRUCTION – Section 810.3 and as follows:

(c) Tree Trimming. Trim living branches, dead and dying limbs and branches 25 mm (1 inch) or more in diameter growing within the legal Right of Way,, growing on an adjacent property that overhang or encroach upon the legal Right of Way, to the height indicated.. Trim branches to the branch collar as shown on the Standard Drawing RC-92M and as directed on site.

Provide a crew consisting of at least 3 skilled workers to perform cutting and trimming, according to accepted arboricultural practices. Use acceptable tools and methods to perform the work. Do not use climbing spurs or spikes.

Treat work-related injuries to remaining trees and shrubs, regardless of species, according to accepted arboricultural practices at no additional cost to the Department.

MEASUREMENT AND PAYMENT – Hour. Payment will be by crew hour and includes all necessary equipment.

00 - ITEM 9810-0052 - SELECTIVE TREE REMOVAL, AS DIRECTED

Addendum:

Associated Item(s): 9810-0052

Header:
ITEM 9810-0052 - SELECTIVE TREE REMOVAL, AS DIRECTED

Provision Body:
810.1 DESCRIPTION – Revised as follows:

This work is the removal of selected trees and shrubs, the treatment of tree injuries, and the removal of stumps and debris as directed on site.

810.3 CONSTRUCTION – Revised as follows:

(a) Tree and Shrub Removal. Living trees and shrubs as directed in the field.

810.4 MEASUREMENT AND PAYMENT - Each

00 - ITEM 9901-0003 - LOCAL POLICE

Addendum:

Associated Item(s): 9901-0003

Header:
LOCAL POLICE

Provision Body:
DESCRIPTION - This work is the scheduling, furnishing, and reimbursement for Local Police officers with police vehicle as needed to control and direct traffic during construction as it affects the following streets:

Tyburn Road

New Ford Mill Road (Intersection with Tyburn Road)

CONSTRUCTION - Schedule and furnish off-duty uniformed police officers as directed by the Engineer or Resident-in-Charge. Police personnel may be either Pennsylvania State Police or Falls Township police.

Officer(s) must be in well-marked police vehicles.

Make all arrangements for the furnishing of the off duty uniformed police personnel with the appropriate police department. Coordination must begin at the commencement of construction, and a minimum of three (3) working days in advance of any work

zone traffic control that would affect one of the above listed streets.

The minimum information that must be presented on the invoice is as follows:

1. Construction contract number

2. Police officer’s name, badge no., and rank

3. Unique invoice no. (that does not change)

4. Date police officer worked

5. Time police officer worked, including AM and PM

6. Location where police officer worked

7. Total hours worked

MEASUREMENT AND PAYMENT - Dollar

The bid proposal will contain a predetermined amount of money (PDA) for this work item. Contractor must submit daily accounts of costs, including proposed hours, assignment, and actual hours for approval by the Resident. Work will be paid for in accordance with the procedure set forth in Section 110.03(d)4 for Force Account Work, Service by Others.

00 - ITEM 9901-0701 AND ITEM 9901-0450

Addendum:

Associated Item(s): 9901-0450, 9901-0701

Header:
ITEM 9901-0450 - 3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS
ITEM 9901-0701 - TEMPORARY TRAFFIC SIGNALS (PERMANENT ONLY)

Provision Body:
In accordance with Section 901.

00 - ITEM 9901-2001 - CLASS 1 TOW TRUCK

Addendum:

Associated Item(s): 9901-2001

Header:
CLASS 1 TOW TRUCK

Provision Body:
DESCRIPTION -

This work is furnishing and operating a ramp truck or tow truck(s) on a per call basis when traffic control Stages 2 through 3 are in full effect on SR 2020 or as directed. The tow truck service must be available on an as needed basis.

EQUIPMENT -

Provide the following vehicles for removal of disabled vehicles when directed.

Class 1 Tow Truck - Extended cab tow truck.

PROCEDURES -

Submit for approval the Tow Truck company information including name, address, phone number, list of tow truck drivers to be used on the project, a copy of their driver's license and/or operating license and insurance policy to the PennDOT Traffic Unit prior to construction.

Upon notification that a disabled vehicle requires removal and operator approval is obtained or removal

is directed by police, contact an approved tow truck service and order removal with the required type of

towing vehicle (s). Do not tow any vehicle without vehicle operator approval or police direction. Inform

the vehicle operator that the tow to the nearest service station is provided at no cost.

Be courteous to operators or occupants of vehicles at all times.

Tow vehicles requiring repair or wrecked vehicles to the nearest service station with a public telephone. Transport vehicle beyond this point only at direction of vehicle owner.

Remove vehicles requiring repairs or wrecked vehicles utilizing a ramp truck when towing is not advisable. Remove these vehicles to a safe location outside the traffic restriction area. Transport vehicle beyond this location at the expense and approval of the operator.

Tow abandoned vehicles and vehicles involved in accidents where the operator is no longer available to a location designated by the police.

Do not tow vehicles which were involved in an accident until so directed by police.

Be responsible for any damage caused by towing operations.

Maintain log of calls for record purposes and submit the records to the Engineer on a monthly basis or as directed.

MEASUREMENT AND PAYMENT - Hour

Hourly rate starts at the arrival of the tow truck onto the scene of the incident.

00 - ITEM 9901-2002 - CLASS 2 TOW TRUCK

Addendum:

Associated Item(s): 9901-2002

Header:
CLASS 2 TOW TRUCK

Provision Body:
DESCRIPTION -

This work is furnishing and operating a ramp truck or tow truck(s) on a per call basis when traffic control Stages 2 through 3 are in full effect on SR 2020 or as directed. The tow truck service must be available on an as needed basis.

EQUIPMENT -

Provide the following vehicles for removal of disabled vehicles when directed.

Class 1 Tow Truck - For Buses (including SEPTA), large trucks and semi-rigs.

PROCEDURES -

Submit for approval the Tow Truck company information including name, address, phone number, list of tow truck drivers to be used on the project, a copy of their driver's license and/or operating license and insurance policy to the PennDOT Traffic Unit prior to construction.

Upon notification that a disabled vehicle requires removal and operator approval is obtained or removal is directed by police, contact an approved tow truck service and order removal with the required type of towing vehicle (s). Do not tow any vehicle without vehicle operator approval or police direction. Inform the vehicle operator that the tow to the nearest service station is provided at no cost.

Be courteous to operators or occupants of vehicles at all times.

Tow vehicles requiring repair or wrecked vehicles to the nearest service station with a public telephone. Transport vehicle beyond this point only at direction of vehicle owner and at owner's expense.

Remove vehicles requiring repairs or wrecked vehicles utilizing a ramp truck when towing is not advisable. Remove these vehicles to a safe location outside the traffic restriction area. Transport vehicle beyond this location at the expense and approval of the operator.

Tow abandoned vehicles and vehicles involved in accidents where the operator is no longer available to a location designated by the police.

Do not tow vehicles which were involved in an accident until so directed by police.

Be responsible for any damage caused by towing operations.

Contractor must maintain a log of calls for record purposes and submit the records to the Engineer on a monthly basis or as directed.

MEASUREMENT AND PAYMENT - Hour

Hourly rate starts at the arrival of the tow truck onto the scene of the incident.

00 - ITEM 9936-0010 - REPLACE STRUCTURE MOUNTED SIGN

Addendum:

Associated Item(s): 9936-0010

Header:

REPLACE STRUCTURE MOUNTED SIGN

Provision Body:

DESCRIPTION – This work is the replacement of the existing diagrammatic sign as indicated for the overhead cantilever structure at ~Station 195+50, Right.

MATERIAL – Section 936.2, except delete the first, third, fifth, sixth, seventh, and eighth bullets.

CONSTRUCTION – Section 936.3 and as follows:

Remove existing sign as indicated and associated hardware as directed. Salvage all aluminum signs, and dispose of other materials. Do not damage sign during removal.

Deliver aluminum signs to the Project Field Office and place in neat, like piles for pickup by the Department's maintenance forces.

Install new sign panel and provide additional approved mounting hardware to properly angle the sign 90 degrees to oncoming traffic. The mounting bracket assembly must

provide adjustability as indicated on "Detail V" of BC-741M Sheet 6 of 6. Do not use "hose clamps".

MEASUREMENT AND PAYMENT – Each.

00 - ITEM 9956-0700 VIDEO DETECTOR

Addendum: 2

Associated Item(s): 9956-0700

Header:
VIDEO DETECTOR

Provision Body:
In accordance with Section 956 except as follows:

CONSTRUCTION – Install video detectors for temporary traffic control as shown on the Temporary Traffic Signal Plans.

Remove the video monitors, mounting hardware, and cable when the temporary signal at New Ford Mill Road (SR 2059) is taken out of service. Avoid damage to the equipment during the removal and storage operations.

Install the video detectors as shown on the traffic signal plans. Provide new cable and mounting hardware, as directed, at no additional cost.

MEASUREMENT AND PAYMENT – Each, includes the temporary and permanent installation.

00 - LAMINATED NEOPRENE BEARING PAD, MODIFIED

Addendum:

Associated Item(s):

Header:
LAMINATED NEOPRENE BEARING PAD, MODIFIED

Provision Body:
DESCRIPTION - This work is furnishing and installing laminated neoprene bearing pads of the type specified.

MATERIAL – As indicated, in accordance with Section 1113.02 and the following:

Fabricated Structural Steel – AASHTO M270/M270M (ASTM A709/A709M) Grade 50.

Elastomer – Type 50 +/- 5 durometer.

PTFE Sheets – PTFE (Polytetrafluoroethylene), dimpled, lubricated, made from virgin PTFE granular resin in accordance with Section 1111.02(c) and ASTM D4894.

Stainless steel sheet in accordance with Section 1111.02(c), 12 gauge as indicated.

FABRICATION – As indicated, in accordance with Section 1111.03 and Section 1113.03.

MEASUREMENT AND PAYMENT – This work is component of the following item(s):

EITHER ITEM 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905

OR ITEM 8110-0002 BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905

00 - NPDES PERMIT EXTENSION

Addendum:

Associated Item(s):

Header:
NPDES PERMIT EXTENSION

Provision Body:
The NPDES Permit for discharge of storm water permit expires on November 15, 2013. Apply for permit extension, at least 180 days prior to permit expiration, for the remaining construction duration.

00 - PART B - SPECIAL DRAWING AND SPECIAL DESIGN REQUIREMENTS

Addendum:

Associated Item(s):

Header:
PART B - SPECIAL DRAWING AND SPECIAL DESIGN REQUIREMENTS

Provision Body:
1. Maintain minimum required clearances.

2. Do not change the location of the abutment beam seats.

3. Construct cast-in-place parapets.

4. Do not use lightweight concrete.

5. If the steel alternate is selected, paint the structural steel in accordance with Section 1060 and the Contract Special Provisions.

6. Use of A588 weathering steel will not be permitted.

7. Erection methods are open, but submit to the Engineer for approval. Temporary erection stresses not to exceed the design stresses.

8. Proprietary walls or abutments will not be permitted.

9. If utilities are required to be relocated to accommodate the proposed girder locations in an alternate design, the cost of utility relocations is at the Contractor's expense.

10. If steel I-shaped girders are selected, they can be hybrid girders, or any standard shape, or standard shapes modified in depth and/or configuration to fit the proposed design concept.

11 Design alternate structures as specified and in accordance with the applicable Strike-Off Letters listed in the attachment entitled "Bridge / Structure Related Effective Policy Letters for Contractor's Alternate Designs".

12. If refined method of analysis is required for steel alternates using curved girders or structures with highly skewed supports, the contractor shall hire a Department pre- approved bridge design consultant experienced in the design of curved bridges or structures with highly skewed supports using refined method of analysis. The contractor shall contact the Department to obtain a list of pre-approved consultants, prior to beginning the design for the alternate superstructure requiring refined method of analysis. Use only the Department approved software for design using refined method of analysis.

13. Do not use deck joints at interior supports.

14. A prestressed concrete alternate superstructure is not permitted. The existing substructure units are inadequate to support the increase in weight over a steel superstructure.

15. Do not change skew, span, underclearance, roadway profile or cross-sections from as-designed structure.

16. Do not use vibrating screed type finishing machines on the bridge deck.

17. Do not use steel box girders.

18. Shop Drawings for elastomeric bearing pads are not required.

19. If an alternate steel superstructure is selected, the contractor is responsible for providing analysis of existing substructure units verifying their ability to handle the new superstructure or the contractor is required to provide calculations for the redesign or strengthening of the existing substructure units. The cost of providing the analysis/ design is incidental to the lump sum alternate bridge cost.

20. Approach slabs are required and must be designed in accordance with BD-628M.

00 - SHIELDING REQUIREMENTS BY AMTRAK

Addendum: 2

Associated Item(s):

Header:

SHIELDING REQUIREMENTS BY AMTRAK

Provision Body:

For shielding requirements during construction of bridge, refer to Section 01520A of attachment "AMTRAK Special Provision". Any shielding required by Amtrak is considered incidental to following:

EITHER 8110-0001 BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905

OR ITEM 8110-0002 BRIDGE STRUCTURE, AS DESIGNED, PLATE GIRDER OPTION, S-28905

OR ITEM 8100-0002 STEEL BRIDGE STRUCTURE

Performance Bonds

Surety Company:	Liberty Mutual Insurance Company	**Status:**	Accepted
Bonding Agency:	Willis of New York, Inc.	**Bond Number:**	014063537
Producer:	Jeannette Porrini/PennDOT BP-002702	**Bond Amount:**	$7,458,181.95
Co-Insurer:	Yes	**NAIC:**	23043

KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc.* of *1750 West College Avenue , State College, PA 16801* as PRINCIPAL,and Liberty Mutual Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$7,458,181.95*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 3 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: Replacement of existing bridge super structure and desinated portions of substructure of the Tyburn Road bridge over AMTRAK, reconstruction of Tyburn Road, and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 2020, SECTION AMT, in Bucks County, Falls Township from approximately station 77+70 at segment 0030 offset 1481 to approximately station 213+00 at segment 0080 offset 4214.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in allrespects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligationsthereunder, including the plans, specifications, and conditions therein referred to and made a partthereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania fromany expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing outof the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any causewhatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway;then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under itor the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on thepart of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY orSURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder,notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/ her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/03/2012 12:29:54 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/03/2012 03:14:15 PM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/03/2012 03:32:31 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/09/2012 08:47:52 AM

Surety Company:	The Fidelity and Deposit Company of Maryland	**Status:**	Accepted
Bonding Agency:	Willis of New York, Inc.	**Bond Number:**	9100260
Producer:	Jeannette Porrini/PennDOT BP-002702	**Bond Amount:**	$7,458,181.94
Co-Insurer:	Yes	**NAIC:**	39306

KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc.* of *1750 West College Avenue , State College, PA 16801* as PRINCIPAL,and The Fidelity and Deposit Company of Maryland a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$7,458,181.94*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 3 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: Replacement of existing bridge super structure and desinated portions of substructure of the Tyburn Road bridge over AMTRAK, reconstruction of Tyburn Road, and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 2020, SECTION AMT, in Bucks County, Falls Township from approximately station 77+70 at segment 0030 offset 1481 to approximately station 213+00 at segment 0080 offset 4214.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL, as Contractor, shall in allrespects comply with and faithfully perform the terms and conditions of said contract, and his, their, or its obligationsthereunder, including the plans, specifications, and conditions therein referred to and made a partthereof, and such alterations as may be made in said specifications as therein provided for, and shall well and truly, and in a manner satisfactory to the Commonwealth of Pennsylvania, complete the work contracted for, and shall save harmless the Commonwealth of Pennsylvania fromany expense incurred through the failure of said contractor to complete the work as specified, or for any damages growing outof the carelessness and/or negligence of said contractor or his, their, or its servants.

And shall save and keep harmless the said Commonwealth of Pennsylvania against and from all losses to it from any causewhatsoever, including patent, trademark, and copyright infringements, in the manner of constructing said section of roadway;then this obligation to be void or otherwise to be and remain in full force and virtue.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done under itor the giving by the Commonwealth of any extension of time for the performance of the contract or any other forbearance on thepart of either the Commonwealth or the PRINCIPAL to the other shall not in any way release the PRINCIPAL and the SURETY orSURETIES or either or any of them, their heirs, executors, administrators, successors or assigns, from their liability hereunder,notice to the SURETY or SURETIES of any such alteration, extension, or forbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Performance Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/ her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/03/2012 12:30:04 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/03/2012 03:15:19 PM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/03/2012 03:32:59 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/09/2012 08:46:06 AM

Payment Bonds

Surety Company:	Liberty Mutual Insurance Company	**Status:**	Accepted
Bonding Agency:	Willis of New York, Inc.	**Bond Number:**	014063537
Producer:	Jeannette Porrini/PennDOT BP-002702	**Bond Amount:**	$7,458,181.95
Co-Insurer:	Yes	**NAIC:**	23043

KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc.* of *1750 West College Avenue , State College, PA 16801* as PRINCIPAL,and Liberty Mutual Insurance Company a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$7,458,181.95*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

Sealed with our respective seals and dated this 3 day of October A.D. 2012.

Whereas, the above bounden PRINCIPAL has undertaken to contract with the said Commonwealth of Pennsylvania, by and through the Secretary of Transportation covering the workidentified below for approximately the sum of the bond amount defined above.

The description and location of the project is as follows: Replacement of existing bridge super structure and desinated portions of substructure of the Tyburn Road bridge over AMTRAK, reconstruction of Tyburn Road, and other miscellaneous construction, as indicated on the approved drawings included in the bid package for STATE ROUTE 2020, SECTION AMT, in Bucks County, Falls Township from approximately station 77+70 at segment 0030 offset 1481 to approximately station 213+00 at segment 0080 offset 4214.

and

WHEREAS, it was one of the conditions of the award of the Secretary of Transportation, acting for and on behalf ofthe Commonwealth of Pennsylvania, pursuant to which said contract was undertaken by the PRINCIPAL that these presentsshould be executed, to become binding upon the date the said contract is approved for the office of Budget, by the Comptroller.

NOW, THEREFORE, The conditions of this obligation is such that if the above bounden PRINCIPAL shall and willpromptly or cause to be paid in full all sums of money which may be due by contractor or corporation, for all materials furnishedor labor supplied or performed in the prosecution of the work, whether or not the said material or labor entered into and becamecomponent parts of the work or improvement contemplated, and for rental of the equipment used and services rendered by public utilitiesin, or in connection with, the prosecution of such work, then this obligation to be void, otherwise to remain in full force andeffect.

The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm,partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided,and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paidin full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgementfor such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that theCommonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to theprovisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shallbe incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

It is further provided that any alteration which may be made in the terms of the contract or in the work to be done or materialsto be furnished or labor to be supplied or performed under it or the giving by the Commonwealth of any extension of time for theperformance of the contract or any other forbearance on the part of either the Commonwealth or the Principal to the other shallnot in any way release the PRINCIPAL and the SURETY or SURETIES or either or any of them, their heirs, executors, administrators,successors or assigns, from their liability hereunder, notice to the SURETY or SURETIES of any such alteration, extension, orforbearance being hereby waived.

IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/03/2012 12:29:30 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/03/2012 03:11:37 PM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/03/2012 03:31:02 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/09/2012 08:47:33 AM

Surety Company:	The Fidelity and Deposit Company of Maryland	**Status:**	Accepted
Bonding Agency:	Willis of New York, Inc.	**Bond Number:**	9100260
Producer:	Jeannette Porrini/PennDOT BP-002702	**Bond Amount:**	$7,458,181.94
Co-Insurer:	Yes	**NAIC:**	39306

KNOW ALL MEN BY THESE PRESENTS, That we, *HRI, Inc.* of *1750 West College Avenue , State College, PA 16801* as PRINCIPAL,and The Fidelity and Deposit Company of Maryland a corporation,as SURETY, are held and firmly bound unto the *Commonwealth of Pennsylvania* in the full and just sum of *$7,458,181.94*, lawful moneyof the United States of America, to be paid to the said Commonwealth of Pennsylvania, or it assigns, to which payment well and truly tobe made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

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and

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The PRINCIPAL and SURETY hereby, jointly and severally, agree with the obligee herein that any individual, firm,partnership, association or corporation, which has performed labor or furnished material in the prosecution of the work as provided,and any public utility which has rendered services in, or in connection with, the prosecution of such work, and which has not been paidin full therefor, may sue assumpsit on this Payment Bond in his, their, or its own name and may prosecute the same to final judgementfor such sum or sums as may be justly due to him, them, or it, and have execution thereon. Provided, however, that theCommonwealth shall not be liable for the payment of any costs or expenses of such suit.

Recovery by any individual, firm, partnership, association or corporation hereunder shall be subject to theprovisions of the "Public Works Contractors' Bond Law of 1967", Act No. 385, approved December 20, 1967, P.L. 869, which Act shallbe incorporated herein and made a part hereof, as fully and completely as though its provisions were fully and at length herein recited.

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IN WITNESS WHEREOF, the said PRINCIPAL and SURETY have duly executed this Bond under seal the day and year firstabove written.

Attorney-in-Fact Certification

*The undersigned attorney-in-fact by executing this Payment Bond certifies that he/she is licensed with the company namedas surety for this bond and that to the best of his/her knowledge the said surety islicensed with the Pennsylvania Insurance Department.

Bond Workflow Status

Status	Name	Disposition	Date/Time
Draft	John R Kulka PE/PennDOT BP-001239	Submit	10/03/2012 12:29:43 PM
Producer Review	Jeannette Porrini/PennDOT BP-002702	Sign	10/03/2012 03:12:29 PM
Contractor Review	John R Kulka PE/PennDOT BP-001239	Sign	10/03/2012 03:31:54 PM
BOD CMD Review	Roland L Rode/PennDOT	Accept	10/09/2012 08:45:43 AM

Insurance

Liberty Mutual

Riverside Office Park
9 Riverside Road
Weston, MA 02493-2298

Company: Liberty Mutual - Adrienne Kisonas
Policy: TB2-631-004125-692
Expiration: 04/01/2013

MBE/WBE Commitments

MBE/WBE: 5% / 5%
Approved: 9.85% / 5.03%

Perform Less Than 50% of Work Items: No
MPL Evaluation: No

Status	Business Partner	Business	% of Bid	Submitted	Acknowledged
Conditionally Approved	Karen Construction Company, Inc.	Subcontractor	0.81%	09/18/2012	09/18/2012
Conditionally Approved	Sanders Construction Co. Inc.	Regular Dealer	7.24%	09/19/2012	09/19/2012
Approved	Callahan Paving Products, Inc.	Regular Dealer	0.34%	09/18/2012	09/18/2012
Approved	Established Traffic Control, Inc.	Subcontractor	1.13%	09/18/2012	09/18/2012
Approved	Guidemark, Inc.	Subcontractor	1.00%	09/18/2012	09/18/2012
Approved	Horizon Engineering, LLC.	Subcontractor	0.31%	09/18/2012	09/18/2012
Approved	Keystone Highway Products, LLC	Subcontractor	0.26%	09/19/2012	09/18/2012
Approved	L B Construction Enterprises, Inc.	Subcontractor	1.51%	09/19/2012	09/18/2012
Approved	Madura Steel Sales, Inc.	Regular Dealer	1.17%	09/18/2012	09/18/2012
Approved	Midori Professional Services, Inc.	Subcontractor	1.10%	09/19/2012	09/19/2012

Karen Construction Company, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Conditionally Approved
Revision Number:

MBE/WBE

Business Partner: Karen Construction Company, Inc.
Type: WBE
Contact: Judy M Noll
Phone: 610-683-8210
DBE JVT%:
Certification: 10714
Cert. Expiration: 06/30/2009

Agreement Amount: $121,125.00
% of Bid: 0.81
Mobilization: $0.00
Starting: 05/01/2013
Completion: 09/01/2013
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8110-0001	BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:25:00 AM
Awaiting Acknowledgement	Judy M Noll Mrs./PennDOT BP-000926	Acknowledge	09/18/2012 12:31:23 PM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 12:40:41 PM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	09/18/2012 12:50:39 PM

Sanders Construction Co. Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Conditionally Approved
Revision Number:

MBE/WBE

Business Partner: Sanders Construction Co. Inc.
Type: MBE
Contact: Milagros G Sanders
Phone: 717-486-5930
DBE JVT%:
Certification: 10806
Cert. Expiration: 08/31/2009

Agreement Amount: $1,079,917.86
% of Bid: 7.24
Mobilization: $0.00
Starting: 06/01/2013
Completion: 12/01/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
8110-0001	BRIDGE STRUCTURE, AS DESIGNED, ROLLED BEAM OPTION, S-28905	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Anna Taylor/PennDOT BP-001239	Submit	09/19/2012 11:03:48 AM
Awaiting Acknowledgement	Msanders Milagrossanders/ PennDOT BP-000795	Acknowledge	09/19/2012 11:06:46 AM
Acknowledged	Craig Huss/PennDOT BP-001239	Submit	09/19/2012 11:15:56 AM
PennDOT Review	Delores A Ritzman/PennDOT	Conditionally Approve	09/20/2012 08:55:14 AM

Callahan Paving Products, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Callahan Paving Products, Inc.
Type: WBE
Contact: Larry Diehm
Phone: 815-254-5646
DBE JVT%:
Certification: 10452
Cert. Expiration: 09/14/2012

Agreement Amount: $50,000.00
% of Bid: 0.34
Mobilization: $0.00
Starting: 01/01/2013
Completion: 09/01/2014
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
9506-0040	PLAIN CEMENT CONCRETE PAVEMENT, 14" DEPTH	SY	11,993.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:15:45 AM
Awaiting Acknowledgement	Darcy Hafler/PennDOT BP-000822	Acknowledge	09/18/2012 08:18:18 AM
Acknowledged	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:35:15 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/18/2012 08:43:39 AM

Established Traffic Control, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Established Traffic Control, Inc.
Type: WBE
Contact: Kevin McFadden
Phone: 215-997-8801
DBE JVT%:
Certification: 12119
Cert. Expiration: 04/30/2014

Agreement Amount: $168,021.00
% of Bid: 1.13
Mobilization: $0.00
Starting: 11/13/2012
Completion: 09/01/2014
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
9901-0450	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS	EACH	6.000
9901-0450	3-LINE CHANGEABLE MESSAGE SIGN WITH TELECOMMUNICATIONS	EACH	6.000
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	SF	600.000
0901-0240	ADDITIONAL TRAFFIC CONTROL SIGNS	SF	600.000
0901-0232	ADDITIONAL WARNING LIGHTS, TYPE C	DAY	365.000
0901-0231	ADDITIONAL WARNING LIGHTS, TYPE B	DAY	365.000
0901-0203	ARROW PANEL	EACH	6.000
0901-0203	ARROW PANEL	EACH	6.000
0901-0120	SPEED DISPLAY SIGN	EACH	2.000
0901-0120	SPEED DISPLAY SIGN	EACH	2.000

Partial Items

Item	Description	Unit of Measure	Quantity
0901-0001	MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:24:22 AM
Awaiting Acknowledgement	Kevin McFadden/PennDOT BP-002897	Acknowledge	09/18/2012 08:58:25 AM

Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 09:51:48 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/18/2012 12:48:21 PM

Guidemark, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Guidemark, Inc.
Type: WBE
Contact: David Lamont
Phone: 215-721-7100
DBE JVT%:
Certification: 11706
Cert. Expiration: 03/31/2014

Agreement Amount: $148,784.21
% of Bid: 1.00
Mobilization: $0.00
Starting: 09/01/2012
Completion: 09/01/2012
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
0966-0106	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/R)	EACH	19.000
0966-0104	SNOWPLOWABLE RAISED PAVEMENT MARKER, TWO WAY BRIDGE DECK HOLDER WITH REFLECTOR (W/B)	EACH	41.000
0966-0018	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/B)	EACH	308.000
0966-0017	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/B)	EACH	8.000
0966-0015	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (W/R)	EACH	18.000
0966-0014	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/R)	EACH	18.000
0966-0011	SNOWPLOWABLE RAISED PAVEMENT MARKER TWO WAY HOLDER WITH REFLECTOR (Y/Y)	EACH	49.000
0964-0222	WHITE EPOXY LEGEND, "RIGHT ARROW", 12' - 0" X 3' - 0"	EACH	2.000
0964-0101	WHITE EPOXY LEGEND, "ONLY", 8' - 0"	EACH	2.000
0964-0021	24" WHITE EPOXY PAVEMENT MARKINGS	LF	444.000
0964-0008	8" WHITE EPOXY PAVEMENT MARKINGS	LF	1,516.000
0964-0007	6" BLACK EPOXY PAVEMENT MARKINGS	LF	804.000
0964-0005	6" WHITE EPOXY PAVEMENT MARKINGS	LF	1,552.000
0964-0002	4" YELLOW EPOXY PAVEMENT MARKINGS	LF	6,114.000
0964-0001	4" WHITE EPOXY PAVEMENT MARKINGS	LF	5,688.000
0963-0010	PAVEMENT MARKING REMOVAL (LEGENDS AND SYMBOLS)	EACH	10.000
0963-0010	PAVEMENT MARKING REMOVAL (LEGENDS AND SYMBOLS)	EACH	10.000
0963-0010	PAVEMENT MARKING REMOVAL (LEGENDS AND SYMBOLS)	EACH	10.000
0963-0008	8" PAVEMENT MARKING REMOVAL	LF	8,087.000
0963-0008	8" PAVEMENT MARKING REMOVAL	LF	8,087.000
0963-0008	8" PAVEMENT MARKING REMOVAL	LF	8,087.000
0963-0006	6" PAVEMENT MARKING REMOVAL	LF	10,640.000

0963-0006	6" PAVEMENT MARKING REMOVAL	LF	10,640.000
0963-0006	6" PAVEMENT MARKING REMOVAL	LF	10,640.000
0963-0004	4" PAVEMENT MARKING REMOVAL	LF	76,923.000
0963-0004	4" PAVEMENT MARKING REMOVAL	LF	76,923.000
0963-0004	4" PAVEMENT MARKING REMOVAL	LF	76,923.000
0960-0008	8" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	LF	2,686.000
0960-0005	6" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	LF	5,892.000
0960-0002	4" YELLOW HOT THERMOPLASTIC PAVEMENT MARKINGS	LF	26,361.000
0960-0001	4" WHITE HOT THERMOPLASTIC PAVEMENT MARKINGS	LF	25,908.000
0901-0352	8" STANDARD PAVEMENT MARKINGS, TAPE, WHITE	LF	544.000
0901-0350	4" STANDARD PAVEMENT MARKINGS, TAPE, WHITE	LF	1,477.000
0901-0340	4" STANDARD PAVEMENT MARKINGS, TAPE, YELLOW	LF	3,488.000
0901-0333	12" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	LF	180.000
0901-0332	8" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	LF	7,543.000
0901-0331	6" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	LF	1,440.000
0901-0330	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, WHITE	LF	24,564.000
0901-0320	4" STANDARD PAVEMENT MARKINGS, PAINT & BEADS, YELLOW	LF	38,194.000
9660-0030	SHOULDER RUMBLE STRIPS	LF	19,452.000
9660-0002	CENTERLINE RUMBLE STRIPS	LF	1,800.000
9660-0001	LANE RUMBLE STRIPS	LF	600.000

Partial Items

None

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 12:24:26 PM
Awaiting Acknowledgement	Nancy E Dolinar/PennDOT BP-000759	Acknowledge	09/18/2012 12:57:17 PM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 02:17:29 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/19/2012 08:28:10 AM

Horizon Engineering, LLC.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Horizon Engineering, LLC.
Type: WBE
Contact: Cynthia D. Smith
Phone: 267-923-8673
DBE JVT%:
Certification: 13474
Cert. Expiration: 09/30/2012

Agreement Amount: $46,950.00
% of Bid: 0.31
Mobilization: $0.00
Starting: 01/01/2013
Completion: 10/18/2014
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
0686-0030	CONSTRUCTION SURVEYING, TYPE B, MODIFIED	LS	1.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:24:44 AM
Awaiting Acknowledgement	Cynthia D Smith/PennDOT BP-004404	Acknowledge	09/18/2012 08:56:51 AM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 09:51:48 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/18/2012 12:49:28 PM

Keystone Highway Products, LLC

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Keystone Highway Products, LLC
Type: WBE
Contact: Laura Moreno
Phone: 215-348-1913
DBE JVT%:
Certification: 10679
Cert. Expiration: 11/30/2009

Agreement Amount: $38,704.00
% of Bid: 0.26
Mobilization: $0.00
Starting: 01/05/2013
Completion: 03/22/2013
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
0615-0040	SUBSURFACE DRAIN OUTLET ENDWALL	EACH	37.000
0605-2850	STANDARD INLET BOX, HEIGHT < /= 10'	EACH	16.000
0605-2730	TYPE M CONCRETE TOP UNIT AND GRATE	SET	14.000
0605-2710	TYPE C CONCRETE TOP UNIT AND GRATE	SET	2.000
0605-1480	MANHOLE	EACH	1.000
0212-0003	GEOTEXTILE, CLASS 2, TYPE B	SY	126.000
0212-0003	GEOTEXTILE, CLASS 2, TYPE B	SY	126.000
0212-0003	GEOTEXTILE, CLASS 2, TYPE B	SY	126.000
0212-0002	GEOTEXTILE, CLASS 2, TYPE A	SY	670.000
0212-0002	GEOTEXTILE, CLASS 2, TYPE A	SY	670.000
0212-0002	GEOTEXTILE, CLASS 2, TYPE A	SY	670.000
0212-0001	GEOTEXTILE, CLASS 1	LF	14,083.000
0212-0001	GEOTEXTILE, CLASS 1	LF	14,083.000
0212-0001	GEOTEXTILE, CLASS 1	LF	14,083.000

Partial Items

None

Comment

None

Workflow

Status	Name	Disposition	Date/Time

Draft	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 01:44:45 PM
Awaiting Acknowledgement	Laura E Fanelli/PennDOT BP-001933	Acknowledge	09/18/2012 04:52:51 PM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/19/2012 09:10:01 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/19/2012 10:47:19 AM

L B Construction Enterprises, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: L B Construction Enterprises, Inc.
Type: MBE
Contact: LaMar Childs
Phone: 215-421-3978
DBE JVT%:
Certification: 13133
Cert. Expiration: 07/31/2012

Agreement Amount: $225,750.00
% of Bid: 1.51
Mobilization: $0.00
Starting: 06/01/2013
Completion: 06/01/2014
Business Type: Subcontractor

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	301,000.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	301,000.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 11:30:50 AM
Awaiting Acknowledgement	Bob Harrington/PennDOT BP-004993	Acknowledge	09/18/2012 02:28:46 PM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/19/2012 09:10:01 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/19/2012 10:43:58 AM

Madura Steel Sales, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%
Status: Approved
Revision Number:

MBE/WBE

Business Partner: Madura Steel Sales, Inc.
Type: WBE
Contact: Ashley Staul
Phone: 724-962-8114
DBE JVT%:
Certification: 2177
Cert. Expiration: 04/30/2014

Agreement Amount: $175,000.00
% of Bid: 1.17
Mobilization: $0.00
Starting: 06/01/2013
Completion: 11/01/2013
Business Type: Regular Dealer

Items

None

Partial Items

Item	Description	Unit of Measure	Quantity
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	301,000.000
1002-0053	REINFORCEMENT BARS, EPOXY COATED	LB	301,000.000

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Craig Huss/PennDOT BP-001239	Submit	09/18/2012 08:23:35 AM
Awaiting Acknowledgement	Debora X Madura/PennDOT BP-001632	Acknowledge	09/18/2012 09:29:08 AM
Acknowledged	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 09:51:48 AM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/18/2012 12:51:19 PM

Midori Professional Services, Inc.

Prime

Contact: Craig Huss
Phone: 610-949-0130
MBE/WBE: 5% / 5%

Status: Approved
Revision Number:

MBE/WBE

Business Partner: Midori Professional Services, Inc.
Type: MBE
Contact: Jilto Robinson
Phone: 215-910-2524
DBE JVT%:
Certification: 5698
Cert. Expiration: 07/31/2012

Agreement Amount: $164,439.00
% of Bid: 1.10
Mobilization: $0.00
Starting: 12/01/2012
Completion: 10/01/2014
Business Type: Subcontractor

Items

Item	Description	Unit of Measure	Quantity
0867-0022	COMPOST FILTER SOCK, 24" DIAMETER	LF	2,030.000
0867-0022	COMPOST FILTER SOCK, 24" DIAMETER	LF	2,030.000
0867-0022	COMPOST FILTER SOCK, 24" DIAMETER	LF	2,030.000
0867-0018	COMPOST FILTER SOCK, 18" DIAMETER	LF	15,425.000
0867-0018	COMPOST FILTER SOCK, 18" DIAMETER	LF	15,425.000
0867-0018	COMPOST FILTER SOCK, 18" DIAMETER	LF	15,425.000
0805-0022	MULCHING - STRAW	TON	34.000
0804-0014	SEEDING - FORMULA E	LB	1,266.000
0804-0013	SEEDING AND SOIL SUPPLEMENTS - FORMULA D	LB	1,351.000

Partial Items

None

Comment

None

Workflow

Status	Name	Disposition	Date/Time
Draft	Anna Taylor/PennDOT BP-001239	Submit	09/18/2012 01:03:45 PM
Awaiting Acknowledgement	Risa Asnen/PennDOT BP-000991	Acknowledge	09/19/2012 01:29:14 PM
Acknowledged	Bill Muzika/PennDOT BP-001239	Submit	09/19/2012 10:14:48 PM
PennDOT Review	Delores A Ritzman/PennDOT	Approve	09/20/2012 08:55:51 AM

Plans

Plans	Addendum
Roadway Plan	2
Supplemental Plans	
Cross Section	
Erosion and Sediment Pollution Control Plan	1
Existing Structure Plan - S-2120	
Other/Project-Specific Plan - Contour Grading and Drainage Plan	
Other/Project-Specific Plan - AMTRAK Catenary Plan	2
Signing and Pavement Marking Plan	2
Structure Plan - S-28905	2
Traffic Control Plan	2
Traffic Signal Plan	2

Attachments

Project-Specific Checklist Items	Addendum
Project Specific - Temporary Concrete Overlay General Plan & Section - For Information Only	2
Project Specific - AMTRAK Procedures for Temporary Permit to Enter	
Project Specific - AMTRAK Safety Specifications for Temporary Permit to Enter	
Project Specific - AMTRAK Insurance Requirements for Temporary Permit to Enter	
Project Specific - AMTRAK Specification - AED-1	
Project Specific - AMTRAK Catenary Structure Loading, Design Criteria, and Standards - AED-2	
Project Specific - Existing Structural Steel Paint Test Results	
Project Specific - High Performance Concrete Attachment - A	
Project Specific - Steel Escalation Option Form	
Project Specific - ECMTS Matrix for Construction	
Project Specific - AMTRAK Idemnity Form	
Project Specific - AMTRAK Contractor Safety Security Awareness Training Request	
Project Specific - AMTRAK Special Provision	
Project Specific - AMTRAK Temporary Permit to Enter	

Reviews

None

Contract Award Items

State Wage Rate - 07-16-2012

Local Agreements and Coordination

None

Environmental Clearances

None

Permits

Environmental Due Diligence (EDD) - Contractor

Environmental Due Diligence (EDD) - PennDOT

NPDES General Permit for Discharge of Storm Water

Right of Way

None

Survey

None

Utilities Clearance

None

Utility Engineering

None

Construction Items

Pre-Bid Construction Schedule

Structures and Geotechnical

Structure Policy Letter - Bridge/Structures Related Effective Policy Letters for Contractor’s Alternate Designs

Railroad Coordination

D4279A Railroad Crossing Data for Contractor 2

Traffic

None

Construction Coordination

None

Maintenance Items

None

Estimates

None

Comments: